



529196
PCT 03/04/04

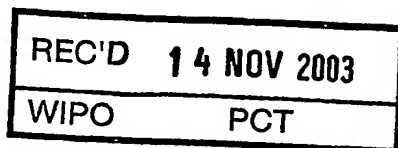


Handwritten signature/initials

Rec'd POT/PTO 24 MAR 2005

INVESTOR IN PEOPLE

The Patent Office
Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ



I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

In accordance with the rules, the words "public limited company" may be replaced by p.l.c., plc, P.L.C. or PLC.

Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.

Signed

Handwritten signature: J. Evans

Dated 26 September 2005

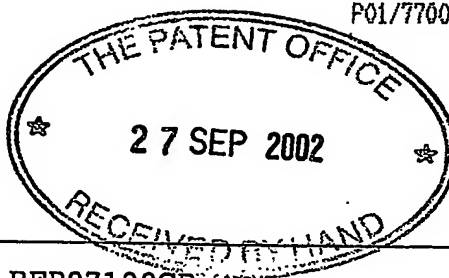
**PRIORITY
DOCUMENT**

SUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH RULE 17.1(a) OR (b)



Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)



The Patent Office

Cardiff Road
Newport
South Wales
NP9 1RH

1. Your reference

REP07190GB

2. Patent application number

(The Patent Office will fill in this part)

0222479.8

26 SEP 2002

3. Full name, address and postcode of the or of each applicant (underline all surnames)

PanTherix Ltd.
12 St. James's Square
London
SW1Y 4GB

Patents ADP number (if you know it)

X If the applicant is a corporate body, give the country/state of its incorporation

United Kingdom

075 169 300 3

4. Title of the invention

CRYSTAL STRUCTURE

5. Name of your agent (if you have one)

Gill Jennings & Every

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

Broadgate House
7 Eldon Street
London
EC2M 7LH

X Patents ADP number (if you know it)

745002

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country

Priority application number
(if you know it)

Date of filing
(day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing
(day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

YES

- a) any applicant named in part 3 is not an inventor, or
 - b) there is an inventor who is not named as an applicant, or
 - c) any named applicant is a corporate body.
- See note (d))

Patents Form 1/77

Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form

Description 23

Claim(s) 2

Abstract

Drawing(s) 188 + 188

CF

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

Any other documents

NO

11. For the applicant
Gill Jennings & Every

I/We request the grant of a patent on the basis of this application.

Signature John Jappy Date 27 September 2002

12. Name and daytime telephone number of person to contact in the United Kingdom

JAPPY, John William Graham
020 7377 1377

Warning

After an application for a patent has been filed, the Comptroller of the Patent Office will consider whether publication or communication of the invention should be prohibited or restricted under Section 22 of the Patents Act 1977. You will be informed if it is necessary to prohibit or restrict your invention in this way. Furthermore, if you live in the United Kingdom, Section 23 of the Patents Act 1977 stops you from applying for a patent abroad without first getting written permission from the Patent Office unless an application has been filed at least 6 weeks beforehand in the United Kingdom for a patent for the same invention and either no direction prohibiting publication or communication has been given, or any such direction has been revoked.

Notes

- If you need help to fill in this form or you have any questions, please contact the Patent Office on 0645 500505.
- Write your answers in capital letters using black ink or you may type them.
- If there is not enough space for all the relevant details on any part of this form, please continue on a separate sheet of paper and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.
- If you have answered 'Yes' Patents Form 7/77 will need to be filed.
- Once you have filled in the form you must remember to sign and date it.
- For details of the fee and ways to pay please contact the Patent Office.

CRYSTAL STRUCTURE

Field of the Invention

The present invention relates to the identification of inhibitors of pathogenic organisms for treating bacterial, fungal and parasitic infections.

5 Background of the Invention

Chorismate Synthase (CS) catalyses the seventh and final step in the Shikimate biosynthetic pathway. The product of the reaction catalysed by CS is the precursor for several biosynthetic pathways, leading to the production of the aromatic amino acids and other vital metabolites. The Shikimate pathway has been identified in bacteria, plants, fungi and apicomplexan parasites, but is not present in animals. For this reason, enzymes of the pathway are well known and validated targets for the generation of anti-infectives, anti-fungals and herbicides, and have been proposed as viable anti-parasitic targets. CS is particularly attractive as an anti-infective target as it sits at the branch point of the Shikimate Pathway, and the product, Chorismic Acid, is the precursor for five distinct subsequent pathways. Significantly, one of these branches leads to the Folate Pathway. The enzymes of the Folate pathway are also absent in animals and several of them are very well characterised anti-infective targets exploited by existing anti-infective agents.

20 CS catalyses the conversion of 5-Enolpyruvyl-3-Shikimate Phosphate (EPSP) to Chorismic Acid (Chorismate), via the 1,4-anti-elimination of phosphate. The stereochemistry of this reaction is unique in nature. A further extremely unusual aspect of the CS enzyme is the absolute requirement for reduced Flavin Mononucleotide (FMN) for activity, the reaction involving no overall change in redox state. Although this suggests that the FMN fulfils a purely structural role, there is evidence that FMN is in fact involved in the reaction mechanism (Ramjee *et al*, J. Am. Chem. Soc., 1991, Vol 113, p8566-8567; Macheroux *et al*, J. Biol. Chem., 1996, Vol 271, p25850-25858; and Macheroux *et al*, Planta, 1999, Vol 207, p325-334).

30 Summary of the Invention

The present invention is based on the identification of the structure coordinates for Chorismate Synthase, in particular the identification of the

coordinates for two binding domains in Chorismate Synthase.

Agents may be produced, based on the structure coordinates, that will interact with either or both of these two binding domains.

According to a first aspect of the invention, a computer is programmed to
5 produce a three-dimensional representation of a molecule or molecular complex, wherein the molecule or molecular complex comprises a binding domain defined by the structure coordinates of

- (a) Arg 39, His 110, Ser 132, Thr 136, Lys 254, Gly 297, Lys 311, Thr 315, Arg 337 and Asp 339 according to Fig. 1; or
- 10 (b) Ser 9, His 10, Arg 39, Asp 54, Arg 107, His 110, Ser 132, Ala 133, Arg 134, Thr 136, Arg 337 and Asp 339 according to Fig. 1,

or where the molecular complex or binding domain has a root mean square deviation of conserved residue backbone atoms of less than 2Å when superimposed on the relevant backbone atoms described by the structure
15 coordinates of said amino acids.

According to a second aspect of the invention, a method for identifying the potential of a chemical entity to associate with Chorismate Synthase enzyme comprises the steps of:

- a) applying computational means to perform a fitting operation
20 between the chemical entity and the Chorismate Synthase binding domain defined by the structure coordinates of either or both of:
 - (a) Arg 39, His 110, Ser 132, Thr 136, Lys 254, Gly 297, Lys 311, Thr 315, Arg 337 and Asp 339 according to Fig. 1; or
 - (b) Ser 9, His 10, Arg 39, Asp 54, Arg 107, His 110, Ser 132,
25 Ala 133, Arg 134, Thr 136, Arg 337 and Asp 339 according to Fig. 1; and
- b) analysing the results of the fitting operation to quantify the association.

According to a third aspect of the invention, a method for identifying a
30 potential inhibitor/agent which will bind to a molecule comprising a Chorismate Synthase binding domain comprises the steps of:

- (a) using the atomic coordinates of

- (a) Arg 39, His 110, Ser 132, Thr 136, Lys 254, Gly 297, Lys 311, Thr 315, Arg 337 and Asp 339 according to Fig. 1; or
- (b) Ser 9, His 10, Arg 39, Asp 54, Arg 107, His 110, Ser 132, Ala 133, Arg 134, Thr 136, Arg 337 and Asp 339 according to Fig. 1,

to generate a three-dimensional structure of a molecule comprising a Chorismate Synthase binding domain;

- b) employing the three-dimensional structure to design or select the inhibitor/agent;
- c) synthesising the inhibitor/agent; and
- d) contacting the inhibitor/agent with the molecule to determine the ability of the inhibitor/agent to interact with the molecule.

According to a fourth aspect of the invention, there is a crystal of the Chorismate Synthase molecule containing the binding domain of Chorismate Synthase, wherein the binding domain has a three-dimensional structure characterised by the atomic structure coordinates of Fig. 1.

Detailed Description of the Invention

The invention describes in Fig. 1 the atomic coordinate data for two binding domains of Chorismate Synthase. The first binding domain is referred to herein as the FMN binding domain, due to its interaction with the FMN molecule. The second domain is referred to herein as the EPSP binding domain, due to its interaction with the substrate EPSP.

In order to use the structure coordinates generated for chorismate synthase, it is usually necessary to convert them into a three-dimensional representation. This can be achieved using conventional software that allows 3-dimensional graphic representation of molecules to be prepared. Suitable software packages include: Rasmol, Cerius, Insight, Quanta, Sybyl, Molcad, VMD, O.

In resolving the crystal structure of Chorismate Synthase, it has been found that the amino acids

- a) Arg 39, Arg 45, Gly 109, His 110, Ala 111, Ser 131, Ser 132, Ala 133, Thr 136, Ile 250, Asn 251, Ala 252, Phe 253, Lys 254, Met

310, Lys 311, Ile 313, Pro 314, Thr 315, Arg 337, Ser 338, Asp 339, Ala 342, Ala 345, Ala 346 and Val 349 according to Fig. 1; are within 5 Å of the atoms comprising the FMN cofactor, and are therefore considered to form part of the FMN binding domain. In addition, residues Asp 240, Phe 294, Glu 295, Gly 296 and Gly 297 are part of an adjacent monomer and are also within 5 Å of the atoms comprising the FMN cofactor, and therefore also form part of the binding site. Furthermore, residue Lys 238 is identified in a water-mediated interaction with the FMN phosphate group, and also forms part of the FMN binding domain.

The amino acid residues that form part of the EPSP-binding domain are

- b) Ser 9, His 10, Arg 39, Arg 45, Arg 48, Met 49, Asp 54, Asp 80, Arg 107, His 110, Ser 131, Ser 132, Ala 133, Arg 134, Thr 136, Thr 137, Glu 336, Arg 337, Ser 338 and Asp 339 according to Fig. 1.

It will be readily apparent to those skilled in the art that the numbering of amino acids in other isoforms of Chorismate Synthase may be different than that specified herein. Corresponding amino acids in other isoforms of Chorismate Synthase may be identified readily by comparison of the amino acid sequences, for example using commercially available homology modeling software packages or conventional sequence alignment packages.

The key amino acids required to define the binding domains are:

- (a) Arg 39, His 110, Ser 132, Thr 136, Lys 254, Gly 297, Lys 311, Thr 315, Arg 337 and Asp 339 according to Fig. 1; or
(b) Ser 9, His 10, Arg 39, Asp 54, Arg 107, His 110, Ser 132, Ala 133, Arg 134, Thr 136, Arg 337 and Asp 339 according to Fig. 1.

In a preferred embodiment, the binding domain for (a) is further defined by the data for the amino acids

- (i) Arg 45, Gly 109, Ala 111, Ser 131, Ala 133, Lys 238, Asp 240, Ile 250, Asn 251, Ala 252, Phe 253, Phe 294, Gly 296, Met 310, Ile 313, Pro 314, Ala 342, Ala 345, Ala 346 and Val 349 according to Fig. 1;

and (b) is further defined by the data for the amino acids

(ii) Art 45, Met 49, Asp 80, Ser 131, and Thr 137 according to Fig. 1.

In addition, data from conservative amino acid substitutions for any of those amino acid residues specified in (i) or (ii), are also within the scope of the invention.

In a further preferred embodiment, binding domain defined by (a) further comprises the data for Ser 339, and/or binding domain (b) further comprises the data for Arg 48, Glu 336 and Ser 338.

Each of the amino acids of Chorismate Synthase is defined by a set of structure coordinates shown in Fig. 1. The term "structure coordinates" refer to Cartesian coordinates derived from mathematical equations related to the patterns obtained by diffraction of a monochromatic beam of X-rays by the atoms of a protein or protein ligand complex in crystal form. The diffraction data are used to calculate an electron density map of the repeating units of the crystal. The electron density map is then used to establish the positions of the individual atoms of the enzyme or enzyme complex.

It will be apparent to the person skilled in the art that variations in the data set of coordinates could define a similar or identical shape. Slight variations in the individual coordinates will have little effect on overall structure. In terms of the binding domains - such variations would not be expected to significantly alter the nature of ligands which would bind to those domains, nor the affinity that the ligands have for the domains.

The variations in coordinates may be generated by manipulating the crystallographic permutations of the structure coordinates, fractionalisation of the structure coordinates, integer additions or subtractions to sets of the structure coordinates, inversion of the structure coordinates or any combination of the above. Alternatively, modifications in the crystal structure due to mutations, additions, substitutions, and/or deletions of amino acids, or other changes in any of the components that make up the crystal could also contribute to variations in the structure coordinates. Further, alternative crystal forms may exhibit alterations in the interfaces between molecules. If such variations are within an acceptable standard error as compared to the original coordinates, the resulting

3-dimensional shape is considered to be the same. Various computational analyses may therefore be necessary to determine whether a molecule or the binding domain portion of the molecule is sufficiently similar to the Chorismate Synthase binding domain described herein. This analysis may be carried out using conventional software packages, including the Molecular Similarity application of QUANTA (Accelrys, San Diego, CA) version Quanta2000, or Isqkab of the CCP4 suite.

The Molecular Similarity program allows a comparison between different structures, based on superimposing a target structure over the previously defined structure, using defined atom equivalencies to perform a fitting operation. For the purposes of this invention, equivalent atoms are defined as protein backbone atoms (N, C and O) for all conserved residues between the two structures being compared. In addition, a rigid fitting operation is performed.

For the purposes of this invention, any molecule or molecular complex or binding domain thereof that has a root mean square deviation of conserved residue backbone atoms of less than 2 Å when superimposed on the relevant backbone atoms described by the structure coordinates of Fig. 1, is considered identical. More preferably, the root mean square deviation is less than 0.5 Å, more preferably less than 1 Å.

The term "root mean square deviation" means the square root of the arithmetic mean of the squares of the deviations from the mean.

The present invention may make use of standard computer hardware and software, suitably programmed with the structure coordinates listed in Fig. 1, or those relating to either or both of the two binding domains specified above.

The present invention permits the use of molecular design techniques to identify, select and design chemical entities, including inhibitors, agonists or antagonists, capable of binding to one or both of the Chorismate Synthase binding domains. The invention is particularly useful in identifying inhibitory compounds that can be used to treat pathogenic infections.

The use of computational methods to design compounds that interact with specific enzymes is now well established.

A potential inhibitor may be evaluated by a series of steps in which

various chemical entities are screened and selected for their ability to associate with one or more of the binding domains. Computer programs that assist in this process of selecting chemical entities include:

1. GRID (P.J. Goodford, "A Computational Procedure for Determining Energetically Favorable Binding Sites on Biologically Important Macromolecules", *J. Med. Chem.*, 28, pp. 849-857 (1985)). GRID is available from Oxford University, Oxford, UK.
2. MCSS (A. Miranker *et al.*, "Functionality Maps of Binding Sites: A Multiple Copy Simultaneous Search Method." *Proteins: Structure, Function and Genetics*, 11, pp. 29-34 (1991)). MCSS is available from Accelrys, San Diego, Calif.
3. AUTODOCK (D. S. Goodsell *et al.*, "Automated Docking of Substrates to Proteins by Simulated Annealing", *Proteins: Structure, Function, and Genetics*, 8, pp. 195-20 (1990)). AUTODOCK is available from Scripps Research Institute, La Jolla, Calif.
4. DOCK (I. D. Kuntz *et al.*, "A Geometric Approach to Macromolecule-Ligand Interactions", *J. Mol. Biol.*, 161, pp. 269-288 (1982)). DOCK is available from University of California, San Francisco, Calif.
5. Glide - Halgren, Abstr. pap. Am. Chem. Soc., 2000, V220, 83-PHYS part2.
6. Cerius - Diller & K. M. Merz, *Proteins*, 2001, Vol 43, p113-124; and Jain, J. Comp. Aided Molec. Design, 1996, Vol 10, p427-440.

On identification of suitable chemical entities, a single compound can be assembled and tested for efficacy.

An alternative method of identifying a compound or compounds that associate with one or more of the binding domains, is to use *De Novo* ligand design methods, for example:

1. LUDI (H.-J. Bohm, "The Computer Program LUDI: A New Method for the De Novo Design of Enzyme Inhibitors", *J. Comp. Aid. Molec. Design*, 6, pp. 61-78 (1992)). LUDI is available from Accelrys, San Diego, Calif.
2. LEGEND (Y. Nishibata *et al.*, *Tetrahedron*, 47, p. 8985 (1991)). LEGEND is available from (Tripos), San Diego, Calif.
3. LeapFrog (available from Tripos Associates, St. Louis, Mo.).

4. SPROUT (V. Gillet *et al.*, "SPROUT: A Program for Structure Generation)", *J. Comput. Aided Mol. Design*, 7, pp. 127-153 (1993)). SPROUT is available from the University of Leeds, UK.

5. add others here, and some more up-to-date references for below.

5 Other molecular modeling techniques may also be employed in accordance with this invention [see, e.g. N.C. Cohen *et al.*, "Molecular Modeling Software and Methods for Medicinal Chemistry, *J. Med. Chem.*, 33, pp. 883-894 (1990); see also, M. A. Navia and M. A. Mureko, "The Use of Structural Information in Drug Design", *Current Opinions in Structural Biology*, 2, pp. 202-
10 210 (1992); L. M. Balbes *et al.*, "A Perspective of Modern Methods in Computer-Aided Drug Design", in *Reviews in Computational Chemistry*, Vol. 5, K. B. Lipkowitz and D. B. Boyd, Eds., VCH, New York, pp. 337-380 (1994); see also, W. C. Guida, "Software For Structure-Based Drug Design", *Curr. Opin. Struct. Biology*, 4, pp. 777-781 (1994)].

15 Compounds designed using computational methods, can then be synthesised and tested in an *in vitro* model, to measure their activity. Suitable assays will be apparent to the skilled person, based on conventional assays for screening compounds against the Chorismate Synthase enzymes. For example, a suitable enzymatic assay may be that revealed by Webster *et al* (GB patent
20 application 0130529.1).

The present invention is based on the crystal structure of Chorismate Synthase from *S. pneumoniae*. However, isoforms in other microorganisms can also be prepared using the methods disclosed in the Example.

The following Example illustrates the invention.

25 EXAMPLE: Production and purification of wild type and SeMet CS from *Streptococcus pneumoniae*

The SpCS gene was identified based on its homology to other known CS genes and proteins from non-annotated genomic sequences of *S. pneumoniae* deposited in the public databases. The gene was cloned by firstly amplifying the
30 relevant region of the *S. pneumoniae* genome using the polymerase chain reaction and the DNA fragment corresponding to the amplified SpCS gene cloned into the expression vector pET22b. Protein was over-produced in the *E.*

coli strain BL21 (DE3) using methods well known in the art. SpCS protein was found to be produced as a soluble, active enzyme. SpCS protein was purified using a modified protocol based on that published by Horsburgh *et al.*, Microbiology 1996; 142(10): 2943-2950. Cells were disrupted in buffer (Buffer A: 50 mM Tris-HCl, pH 7.5, 50 mM KCl, 0.5 mM DTT, 10% glycerol) by sonication and debris pelleted by centrifugation. The supernatant was applied directly to an anion exchange chromatography column (Q-sepharose, purchased from AP Biotech. Ltd) and bound protein eluted with a 150 - 300 mM KCl gradient in Buffer A. Fractions were collected and those containing SpCS identified by SDS-PAGE and enzyme assay. SpCS-containing fractions were pooled and applied directly to a Blue-sepharose 4B resin (Sigma Chemical Co.) pre-equilibrated with Buffer A plus 300 mM KCl. Bound protein was eluted with Buffer A plus 600 mM KCl. SpCS activity was dialysed extensively against Buffer B (25 mM K PO₄, pH 7.0, 0.5 mM DTT, 10% glycerol). Cellulose phosphate P11 resin (Whatman Ltd) was prepared fresh as per the manufacturer's instructions immediately prior to use and pre-equilibrated with Buffer B. SpCS protein was applied to the resin and bound protein eluted with a 25 - 500 mM gradient of K PO₄, pH 7.0. SpCS fractions were pooled and concentrated and finally dialysed into Buffer A plus 50% glycerol for long-term storage at -20°C.

Crystallisation of CS from *S. pneumoniae*. Crystal structures were prepared under two different crystallising conditions, resulting in a total of four crystal forms.

- (i) CS from *S. pneumoniae* was crystallised by hanging-drop vapour diffusion. 2 microlitre drops of CS complex solution (10 mg/ml in 10mM Tris pH 7.5, 2mM EDTA, 0.5mM DTT, 2mM FMN, 1mM EPSP) were mixed with an equal volume of reservoir buffer (9% PEG 8000 (w/v), 100mM HEPES pH 7.5, 10% Ethylene Glycol). 0.2 microlitres of a 250 mM solution of NCO was then added and the drops were incubated at a constant 23°C. Monoclinic crystals (space group P21) with $a=81.059$, $b=124.582$, $c=85.163$, $\beta=115.15$ degrees, grew within 1 week. Wild type and SeMet samples gave crystals in identical conditions.

Orthorhombic crystals (space group P212121) with $a=85.62\text{\AA}$, $b=125.29\text{\AA}$, $c=148.15\text{\AA}$ were also obtained using these conditions, and both crystal forms were obtained from the same drops.

- (ii) CS from *S. pneumoniae* was crystallised by hanging-drop vapour diffusion. 2 microlitre drops of CS complex solution (10 mg/ml in 10mM Tris pH 7.5, 2mM EDTA, 0.5mM DTT, 2mM FMN, 1mM EPSP) were mixed with an equal volume of reservoir buffer (36% PEG 400 (v/v), 100mM NaKPO4 pH 6.2, 200mM NaCl). The drops were incubated at a constant 23°C. Orthorhombic crystals (space group P21212) with $a=92.92\text{\AA}$, $b=122.32\text{\AA}$, $c=72.72\text{\AA}$ grew within 1 week. Monoclinic crystals (space group P21) with $a=83.81\text{\AA}$, $b=96.02\text{\AA}$, $c=131.96\text{\AA}$ and $\beta=108.11$ degrees were also obtained using these conditions, and both crystal forms were obtained from the same drops.

Structure solution and refinement.

All data sets used to solve the SeMet CS structure were collected at ESRF, Grenoble, France, using a Mar charge-coupled detector, and were processed and reduced using programmes of the HKL and CCP4 suites. A three wavelength MAD (Multiwavelength Anomalous Dispersion) dataset was collected to 2.7\AA , and a high resolution dataset was collected to 1.9\AA . In both cases the crystals were monoclinic, and grown from condition (i) as described above. 30 of 48 Selenium atom positions were identified using Shake'n'Bake (SnB), and programs of the CCP4 suite were used to locate the remaining Selenium atom positions, refine these atomic parameters and to generate MAD phases. Initial maps were of sufficient quality to determine matrices describing the Non-crystallographic symmetry (NCS) within the crystal. A combination of solvent-flattening, phase extension and four-fold NCS averaging using DM produced traceable maps with a mean Figure of Merit (FOM) of 0.77 to 2.0\AA resolution.

The protein model was constructed using iterative cycles of model building (Quanta) and refinement (REFMAC). NCS restraints were initially applied but were relaxed as it became apparent that there were differences between NCS-related molecules. Progress of the refinement was monitored using the Free R-value. The final model contains all 388 residues of each of four

monomers. All protein atoms are well defined in electron density. Each of the four active sites contains FMN and EPSP. In addition, two other FMN molecules have been identified bound to the surface of the protein. The final model also contains seven Ethylene Glycol (ETG) molecules, nine Hexaammine Cobalt (III) chloride (NCO) molecules, four sodium ions and 1925 water molecules. The R-factor of the refined model is 15.69% (Rfree = 22.24%) and the geometry of the model has been verified using PROCHECK. Table 1 summarises the crystallographic data sets that were used to solve the CS structures described herein.

Structure of an SpCS/inhibitor complex derived from SpCS crystals soaked with 5-carboxymethoxy-isophthalic acid (CMIP)

The SpCS-CMIP soak data set was collected at Daresbury Laboratory, Warrington, UK, using an ADSC quantum4 charge-coupled detector, and were processed and reduced using programmes of the HKL and CCP4 suites. The protein structure was solved by Molecular Replacement using AMoRe. Initial electron density maps showed clearly that the inhibitor was present at the EPSP site in each of the four independent monomers within the asymmetric unit. A representation of the inhibitor was built using Cerius2 and was fitted into the electron density. Iterative cycles of model building (Quanta) and refinement (REFMAC) for both protein and inhibitor resulted in the final model. Residues 47-51 were not well defined by the electron density and consequently have been omitted from the model. The final structure therefore contains 383 of 388 residues for each of the four monomers within the asymmetric unit, as well as four FMN molecules, four CMIP molecules, three NCO molecules, twenty-seven ETG molecules and 2116 waters. The R-factor of the refined model is 16.1% (Rfree = 24.7%) and the geometry of the model has been verified using PROCHECK.

Table 1

Data set	Resolution (Å)	Wavelength	Completeness	Rmerge
SeMet Peak	2.5	0.975494	99.6	4.9
SeMet Inflection pt	2.5	0.978959	99.5	5.2
SeMet remote	2.8	0.885500	99.6	3.7
High resolution ternary	2.0	0.978765	99.9	5.7
CMIP inhibitor	2.0	0.978000	96.6	10

Three-dimensional structure of Chorismate Synthase-FMN-EPSP complex.

The structure of SpCS shows the tetrameric arrangement of monomers. Within each tetramer, there are two intimately associated dimers, which pack together much less tightly to give the overall tetrameric assembly. The monomeric structure of SpCS has been compared with the three-dimensional structures of related (FMN-binding and FAD-binding) and unrelated proteins, and no significant structural homologies have been observed. The overall fold of SpCS is therefore unique with respect to all known structures, and accurate modelling of the three-dimensional coordinates of CS would have been impossible from the sequence alone.

The SpCS monomer consists of a single large core domain, which is surrounded by various loops and discrete stretches of secondary structure. This domain consists of an internal layer of four long alpha helices, flanked on either side by four-stranded beta-sheets. Beta-alpha-beta secondary structure arrangements are very uncommon and only a few are described in the SCOP database of standard protein fold classifications (Murzin *et al*, J. Mol. Biol., 1995; 247: 536-540).

1) Secondary structure definitions.

Beta-sheet 1 includes the N-terminus of the protein, and consists of beta-strands B1, B2, B7 and B4 in an anti-parallel arrangement. (We need to add a topology diagram here to define A1, A2, B1, B2, etc). The central helix layer consists of helices A1, A2, A6 and A5, arranged up-down-down-up. The second beta-sheet is also anti-parallel, and consists of strands B8, B10, B14 and B11. The FMN-binding site is at the interface between beta-sheet 2 and one end of

the helix layer. At this point the four helices diverge to leave a small hydrophobic pocket which is part of the binding site for the FMN isoalloxazine ring system. The remainder of the FMN and EPSP-binding sites are formed by beta-sheet 2 and several loops lacking defined secondary structure. The active site is described in more detail below.

2) Description of dimer and tetramer interfaces.

The major SpCS dimer is quite elongated in shape, but nevertheless it appears to be tightly associated. The major feature of the dimerisation interface is the extension of beta-sheet 2 from each monomer into an eight-stranded anti-parallel beta sheet. The two beta sheets come together at strand B11, providing four good hydrogen bonds, but there are many other strong interactions at the dimer interface. The only other secondary structure element which is heavily involved in stabilisation of the dimer is helix A5, which sits directly below B11 in the monomer. This pair of symmetry-related helices pack together along their length at the interface, and while they do not form any specific hydrophilic interactions they bury a considerable amount of hydrophobic surface when they interact. Several other regions of the structure are involved in dimerisation, notably loops between B5 and A10, and between B11 and B14, which extend out from the monomer and pack against the dimer partner. Although there are many strong hydrogen-bonding interactions, there is only one possible salt-bridge at the dimer interface - Lys 238 of one monomer interacts (via water) with the phosphate portion of the active site FMN molecule from its neighbour.

The major component of the tetramerisation interface is beta sheet 1 from each monomer. This sheet is involved in a beta-sandwich type interaction with the equivalent portion of an adjacent dimer. In addition, there are loops on either side of this sheet which are also involved in the dimer-dimer interaction, most notably the loop between strand B7 and helix A2, and the short beta sheet formed by strands B3, B5 and B6. Although much of this interface is hydrophobic, there are several significant hydrogen-bonding interactions, and two strong salt-bridges which are clearly important to the integrity of the tetramer. Arg 13 and Asp 75, which are adjacent on one monomer and close to one of the non-crystallographic symmetry axes, form salt-bridges with the

respective NCS-related residues on the second monomer. These bonds appear to be strong, based on the inter-residue distances and on the directionality of the interaction. There are further ion-pair interactions between Arg 63 and Asp 123, and Arg 120 and Asp 372.

5 3) Active site definition.

Within the ternary crystal structure, the enzyme is present in two distinct states, which are here designated the "open" and "closed" forms. In the "open" form, a portion of the active site is solvent-accessible, while in the "closed" form neither of the ligands at the active site is accessible to solvent. These differences can be ascribed purely to the motions of several of the loops surrounding the active site and are discussed in further detail below.

Although CS binds both a substrate and a cofactor, these two ligands are tightly associated with each other, and the enzyme can be considered to have a single active site or ligand-binding site. The FMN molecule is buried deep within the enzyme, and EPSP binds on top of the remaining exposed portion of the isoalloxazine ring system, completely burying FMN. For this reason, each of the two ligands forms part of the binding site for the other.

As described above, one end of beta-sheet 2 provides a flat, fairly hydrophobic surface against which the FMN isoalloxazine ring system packs. The ribityl portion of FMN is well buried, sandwiched between three loops which provide interactions with the FMN hydroxyl and phosphate groups. In the monomer, the FMN phosphate is solvent accessible, but this group is completely buried on dimerisation. The FMN phosphate is coordinated by three Lysine residues, Lys 311, Lys 254 (via water) and Lys 238 (via water), and has close contacts with main-chain nitrogen atoms of Gly 296 and Ala 252. The interactions with Lys 238 and Gly 296 may be particularly significant as these residues belong to the adjacent molecule within the major dimer, and hence they contribute to stabilisation of the dimer. In addition, there is a sodium ion 2.8Å from one of the phosphate oxygens which is presumably involved in the stabilisation of the negative charge on the phosphate.

Although the FMN has been described as well buried in the structure of the CS dimer, there are a considerable number of solvent molecules close to

both the phosphate and ribityl regions of FMN. These water molecules are discrete and well-ordered, and many mediate interactions between FMN and CS, while a few also coordinate EPSP. FMN oxygens O5* and O4* are surrounded by several solvent molecules, and neither makes any direct interactions with the protein. Oxygen O3* also makes no interactions with CS, but is involved in a strong intramolecular hydrogen bond with one of the FMN phosphate oxygens, which is likely to stabilise FMN in the conformation present in the active site. Oxygen O2* is the only FMN atom which makes a direct interaction with EPSP - there is a hydrogen bond between O2* and one of the oxygens of the EPSP carboxylate. O2* also coordinates the side-chain nitrogen of conserved residue Asn 251.

In contrast to the remainder of the FMN molecule, the isoalloxazine ring system makes few specific interactions with CS, but nevertheless it helps to bury a considerable area of hydrophobic surface. Unusually for an FMN-binding protein, there are no pi-stacking interactions between protein and FMN; instead the binding surface for the isoalloxazine rings is formed by small hydrophobic residues Ala 342, Ala 346, Ala 252, Ile 313 and Met 310. This may help the protein to accommodate FMN in the reduced state, in which the isoalloxazine system is proposed to bow slightly around the two central nitrogen atoms.

Interactions made by the pyrimidinedione portion of the isoalloxazine ring system are affected by the conformations of active site loops which determine whether the protein is in the "open" or "closed" state. The catalytic histidine residue His 110 is close to both N1 and O2 of FMN in the "open" state, and appears to be hydrogen-bonded to O2 in the crystal structure. However, in the "closed" state, the histidine side-chain moves relative to FMN and no longer interacts. The movement of His 110 is correlated with a change in conformation of the loop between residues Pro 314 and Leu 320, which results in residue Thr 315 coming considerably closer to FMN in the "closed" form. FMN O2 is 3.4Å from 315 N in the "open" form, but the main-chain nitrogen makes a stronger hydrogen bond in the "closed" form and is just 3.1Å from O2. In addition, the conformation of the side chain of Thr 315 changes, allowing the side-chain hydroxyl to also make a hydrogen-bonding interaction with O2 of FMN.

The change of conformation of the loop containing Thr 315 is associated with a concerted change in the conformation of the loop between residues Tyr 331 and Pro 340. In the "open" form, residues from this loop are involved in protein-FMN interactions, but each of these is mediated by solvent. Two water molecules make strong hydrogen bonds to N3 and O4 of FMN, and are also hydrogen-bonded to the side-chains of residues Ser 338, Asp 339 and Arg 45. In the "closed" form, the positions of several of the residues between 331 and 340 change considerably, and the loop moves closer to the FMN molecule, displacing the two water molecules bound to N3 and O4 of FMN. Consequently, both N3 and O4 of FMN make direct interactions with the protein when CS is in the "closed" form, which will impart considerable binding energy. The main chain of Asp 339 moves by over 1.7Å to allow a hydrogen bond from FMN O4 to the main chain nitrogen of residue 339. There is a more pronounced shift of almost 3Å in the position of Ser 338, resulting in the side-chain oxygen of this residue sitting within 0.6Å of the position of one of the water molecules displaced from the "open" form, and making a hydrogen bond to FMN N3.

The remaining FMN heteroatom is N5, which does not make any direct interaction with the protein, but is hydrogen-bonded to a water molecule in both "open" and "closed" forms of the enzyme. In each case the solvent molecule is also hydrogen-bonded to both Arg 45 and Asp 339. In addition to this interaction, N5 sits almost directly under C2 of EPSP, and is poised to abstract the pro-R hydrogen atom which points down towards it. The separation of atoms N5 and C2 is 3.5Å in both "open" and "closed" forms of CS.

Although EPSP makes just one interaction with FMN, there are extensive interactions between EPSP and the enzyme. The enol-pyruvyl moiety is particularly tightly bound, with three conserved Arginine residues forming an enclosed binding site. There is a strong salt-bridge interaction with Arg 39, with N-O separations of 2.6Å (NH1 - O20) and 2.9Å (NH2 - O19). In addition, there are further strong hydrogen bonds from O20 to Arg 45 NH2 (2.7Å) and from O19 to Arg. 134 NH1 (3.1Å). These residues and others in the immediate environment form a tight pocket within which the pyruvyl moiety fits snugly. O15 of EPSP makes an additional interaction with NH2 of Arg 45, and the vinyl group

is surrounded by the aliphatic portions of Arg 134 and Arg 48.

The interactions of the second carboxyl group of EPSP have already been described. There is a hydrogen bond to O2* of FMN, and also an interaction with His 110 ("closed" form) or with a solvent molecule which is also bound to His 110 ("open" form). There is one other interaction - in both forms of the enzyme there is a water-mediated interaction between EPSP O8 and NH1 of conserved Arg 107. This residue is held in place by an interaction with Asp 112 (both residues completely conserved) and its position is identical in both "open" and "closed" forms.

O21 of EPSP appears to make little contribution to binding. It makes a single water-mediated interaction with the side-chain of Asp 339, the position of which is affected very little by the change in conformation of adjacent residues.

In contrast, the binding of the phosphate group of EPSP is influenced to a much greater extent by the conformation of the loop between residues 331 and 340. In particular, the guanidinium portion of Arg 337, which sits at the apex of the loop, interacts strongly with the EPSP phosphate when in the "closed" conformation, but is displaced by almost 10Å away from the active site in the "open" conformation. In both forms, the phosphate group is liganded by the side-chains of His 10 and Arg 48. In the "open" form, the phosphate makes no further interactions with the protein, and is surrounded by a number of solvent molecules. However, in the "closed" form, the phosphate makes direct hydrogen bonds to both the main chain carbonyl and the guanidinium group of Arg 337, this latter a strong salt-bridge interaction. The interaction with the carbonyl of Arg 337 necessitates a proton on the phosphate oxygen, and allows the likely protonation states of the remaining phosphate oxygen atoms to be assigned. O10 of EPSP shows a strong H-bond to a water molecule in both "open" and closed forms of the active site. This water is additionally coordinated by the sidechains of the completely conserved Serine residues Ser 9 and Ser 132. Its position, allied to the fact that it is very tightly bound (low B factor), suggests a possible role in the catalytic mechanism. It interacts directly with O[??] of EPSP, and as it makes the only strong H-bond with this atom, it is likely to be involved in stabilising the partial negative charge that will build up on O[??] as the bond

between it and C1 lengthens and ultimately is broken. This water molecule is conserved in the inhibitor structure, and again is very well-ordered in relation to adjacent solvent by comparison of temperature factors. Two of these other water molecules are conserved in both structures, and fill space between the central part of the EPSP active site and the sidechain of Arg 107. There is also a water molecule in the inhibitor structure which sits within 0.3Å of the position of O14 (phosphate oxygen) of EPSP, and maintains the important interactions with the mainchain carbonyl of Arg 337.

In addition, EPSP makes other water-mediated hydrogen bonds with a number of other main and side-chain atoms, including the side chain of Arg 101. The side chain conformation of this residue changes considerably between the two forms of the enzyme in order for this interaction to be possible.

4). Three-dimensional structure of Chorismate Synthase-FMN-CMIP complex.

The structure of CMIP bound to the complex of SpCS and FMN was determined to 2.0Å resolution. An overlay of the protein coordinates from the CMIP and ternary structures showed that there were few significant differences between them. The most significant of these is the absence of the "open" form of the SpC1 active site in the inhibitor-bound structure. This has subsequently been demonstrated to be a consequence of the orthorhombic symmetry of the inhibitor structure, as opposed to the monoclinic symmetry of the ternary structure. Crystal contacts, present in the monoclinic form but not in the orthorhombic form, are responsible for the presence of the "open" form of the active site in the ternary structure. Thus each of the four monomers within the SpC1-FMN-CMIP structure has the "closed" conformation at the active site. Comparison of the Cα positions of the "closed" forms of both ternary and inhibitor structures shows they are essentially identical, with an RMSD of 1.2Å. Although the protein backbone follows the same path in each case, there are differences in sidechain positions due to the absence of the EPSP phosphate group in the inhibitor structure. When the phosphate group is present, it makes a number of interactions (as described above), which cannot be fulfilled in the inhibitor structure. In particular, the sidechain of Arg 337, which is critically involved in

coordination of the EPSP phosphate, adopts a very different conformation in the inhibitor structure. The other region in which there are differences which have a significant effect on the active site is the loop between residues Tyr 43 and Glu 52, which has a helical conformation in the ternary structure. Five residues at the centre of this loop - Gly 47 to Ile 51 - were impossible to place in the electron density for the inhibitor structure, but from the positions of the residues on either side of the missing ones it is clear that this loop does not occupy the same region of space as in the ternary structure. This is also a consequence of the absence of the phosphate group of EPSP - Arg 48 at the apex of the 'missing' loop is another residue which makes a strong hydrogen-bond interaction with the phosphate group, and it is therefore likely that this interaction is required in order to tie this loop into the helical conformation. Although five residues are missing from this loop, it is clear from the positions of those residues which it has been possible to fit, that the loop (from Tyr 43 to Glu 52) has flexed out of the active site, and therefore increases the space which is available at the EPSP site, specifically at the O21 (hydroxyl) and C17 (vinyl) positions as well as that of the phosphate.

The inhibitor mimics each of the interactions made by the two carboxyl groups of EPSP. When the protein coordinates from the ternary and CMIP structures are overlaid, the positions of the oxygen atoms of the two carboxylate groups from each ligand superimpose almost exactly. Both EPSP and CMIP possess two carboxylate groups separated by a five atom chain in a trans configuration, and this simple motif appears to be a major determinant of the binding of each molecule. One difference however, is that in EPSP the majority of the five linker atoms, and all of those within the EPSP ring, are saturated and are sp³ hybridised. In contrast, three of the five linker atoms in CMIP come from the phenyl ring, and therefore the majority of the linker in this case is unsaturated and sp² hybridised. Although the carboxymethoxy chain has two sp³ hybridised atoms, these are almost coplanar with the inhibitor phenyl ring. The inhibitor, therefore, represents a second method of placing the two vital carboxylate groups in the appropriate positions to make the interactions corresponding to those of EPSP. Lacking the saturated ring system of EPSP,

and the subsequent kink at C5, the inhibitor compensates with an almost planar system in which several of the bonds within the five atom linker are shorter than those in EPSP itself. Despite this, the distance between the carbon atoms of the carboxylate groups in CMIP (7.2Å) is slightly longer than in EPSP (7.0Å) - this suggests that there is the potential to improve the affinity of the inhibitor by shortening this distance.

While the two carboxylate groups therefore overlay well, the remainder of the two molecules do not. Their central rings occupy quite different regions of the active site. Specifically, while the carboxylate which sits above FMN and interacts with His 110 in EPSP is the one which is directly attached to the central ring, the corresponding interaction in the inhibitor structure is made by the carboxylate which is not directly attached to the phenyl ring. The central rings of the two ligands therefore do not overlap at all. The central ring of the inhibitor sits considerably further out of the plane of the FMN rings than EPSP, and therefore comes into van der Waals contact with the main chain atoms of Ala 133 and Arg 134, as well as packing against the aliphatic portion of the sidechain of Arg 134. EPSP, in contrast, has a central ring which kinks in such a way as to place several atoms (C1, C6 and pendant hydroxyl oxygen O21) close to the plane of the FMN rings. This does not bring these atoms close enough to the protein for any direct interactions, as discussed above, but it does bring EPSP closer in space to Arg 45 and Asp 339, both of which interact with O21 via a water molecule.

Although CMIP exhibits a 1,3,5-substitution pattern on a central six-membered ring, analogous to that seen in EPSP, the remaining substituent (5-carboxylic acid) does not come close to overlapping the corresponding moiety in EPSP (the phosphate group). Instead, the 5-carboxylic acid of CMIP sits approximately in the position of the guanidinium group of the Arg 48 sidechain. As already discussed, this prevents this region of the protein from adopting its ternary conformation, but also has the effect that the inhibitor is unable to fulfill any of the interactions which are made by the EPSP phosphate group. Despite the fact that the protein is in the "closed" conformation, the residues on the "lid" are too remote from and have incorrect orientations relative to the 5-carboxylate

of the inhibitor to be able to make any interactions. There is therefore slightly more space in this region of the active site in the inhibitor structure, and this space is filled by solvent molecules, several of which make strong interactions with the 5-carboxylate. There are also a number of solvent molecules whose positions are conserved in both crystal structures. Of particular interest is the water molecule which mediates the interaction between Ser 9, Ser 132 and O10 of EPSP, which has been discussed previously.

5) The use of Molecular Replacement to solve a novel CS structure.

The method of Molecular Replacement was used to determine the three dimensional coordinates of CS from the pathogenic bacterium *Enterococcus faecalis*. The crystal structure coordinates of CS from *Streptococcus pneumoniae* were used as a starting model in order to determine approximate phase information. Said phases were used in the determination of electron density maps, which were treated as described above. The differences (both sequence and structural) between EfCS and the starting model were apparent from these maps, allowing the accurate determination of the three-dimensional coordinates of EfCS. (Is this sufficient to cover the same use in gram -ve and fungal species? We can explicitly add the use in gram -ve species here?).

Definition of the CS active site.

The residues composing the CS active site can be divided into two groups. First, there are the residues which are involved in contacts between the protein and FMN (the 'FMN-binding site'). Second, there are the residues which are involved in contacts between the protein and EPSP (the 'EPSP-binding site'). There is some overlap in the content of these two sites, although they are largely distinct. There are additional interactions between the ligand at the FMN-binding site (FMN) and the ligand at the EPSP-binding site (EPSP or CMIP), and therefore each ligand can be considered to comprise part of the binding site of the other. In the structures of the inhibitor complexes described above, the inhibitor molecule is accommodated within the EPSP-binding site, and makes interactions only with residues which have been implicated in the binding of EPSP by the CS-FMN complex.

The FMN-binding site comprises residues from two monomers, related by

the tight dimerisation interaction. Specifically, the residues Arg 39, Arg 45, Gly 109, His 110, Ala 111, Ser 131, Ser 132, Ala 133, Thr 136, Ile 250, Asn 251, Ala 252, Phe 253, Lys 254, Met 310, Lys 311, Ile 313, Pro 314, Thr 315, Arg 337, Ser 338, Asp 339, Ala 342, Ala 345, Ala 346, Val 349 from the monomer to which the FMN is bound are within 5Å of the FMN atoms and therefore can be considered to form part of the binding site. In addition, residues Asp 240, Phe 294, Glu 295, Gly 296, Gly 297 from an adjacent monomer are also within 5Å of FMN and form part of the binding site. In addition, residue Lys 238, also from the adjacent monomer, is more than 5Å from FMN but is involved in a water mediated interaction with the FMN phosphate group, and therefore must also be considered to be a part of the FMN-binding site. As stated above, EPSP itself also forms part of the FMN-binding site.

The EPSP-binding site is displaced from the dimerisation interface relative to FMN, and therefore comprises residues from only the monomer to which the ligands are directly bound. Specifically, residues Ser 9, His 10, Arg 39, Arg 45, Arg 48, Met 49, Asp 54, Asp 80, Arg 107, His 110, Ser 131, Ser 132, Ala 133, Arg 134, Thr 136, Thr 137, Glu 336, Arg 337, Ser 338, Asp 339 are within 5Å of EPSP in the closed form of the active site and therefore can be considered to form part of the EPSP binding site. As stated above, FMN itself also forms part of the EPSP-binding site.

Residues Glu 336, Arg 337, Ser 338 are displaced from the active site in the "open" form, and can therefore not be considered to be part of the EPSP-binding site or of the FMN-binding site in the "open" form of the enzyme.

Figure 2 shows a sequence alignment for CS from the following bacterial species: *E. coli*, *S. typhi*, *Y. pestis*, *H. influenza*, *P. aeruginosa*, *N. meningitidis*, *N. gonorrhoeae*, *C. difficile*, *S. aureus*, *B. subtilis*, *S. pneumoniae*, *E. faecalis*, *M. tuberculosis*, *P. multocida*, *H. pylori*. Sequences from fungi (*N. crassa*), plant (*A. thaliana*) and apicomplexan parasites (*P. falciparum*, *T. gondii*) are also included for comparison. The residues which comprise the FMN and EPSP-binding sites, as listed above, are highlighted. Of these, Ser 9, His 10, Arg 39, Arg 45, Asp 54, Asp 80, Arg 107, Gly 109, His 110, Ala 111, Ser 131, Ser 132, Ala 133, Arg 134, Thr 136, Asp 240, Ile 250, Asn 251, Ala 252, Lys 254, Gly 296, Gly 297, Lys 311,

Thr 315, Arg 337, Asp 339, Ala 346, Val 349 are either completely conserved or are very highly conserved and only conservative mutations occur across the sequences of bacterial pathogens, fungi, plants and apicomplexan parasites. In addition, residues at positions Met 49, Thr 137, Phe 253, Phe 294, Met 310, Ala 242, are well conserved in terms of size and hydrophobicity across the same range of species. The residues which are involved in hydrogen-bonding or salt-bridge interactions with FMN (these comprise His 110, Lys 311) or either of EPSP or the inhibitor CMIP (these comprise His 10, Arg 39, Arg 45, His 110, Arg 134 and Arg 337) are totally conserved across all of the species listed above, with the exception of Arg 45, which is completely conserved in gram-positive bacteria, but less conserved in other species. However, residue 345, which is Ala in gram-positive bacteria but is a completely conserved Arginine in all other species, is perfectly placed to interact with EPSP or inhibitor when Arg 45 is not present. When Arginine is modeled at position 345, the guanidinium group is within 1Å of the guanidinium group of Arg 45. Therefore each of the residues required for essential hydrogen-bonded or salt-bridge interactions between CS and ligand or inhibitor is present in bacterial, fungal, plant and parasite species.

CLAIMS

1. A computer programmed to produce a three-dimensional representation of a molecule or molecular complex, wherein the molecule or molecular complex comprises a binding domain defined by the structure coordinates of

- 5 (a) Arg 39, His 110, Ser 132, Thr 136, Lys 254, Gly 297, Lys 311, Thr 315, Arg 337 and Asp 339 according to Fig. 1; or
- (b) Ser 9, His 10, Arg 39, Asp 54, Arg 107, His 110, Ser 132, Ala 133, Arg 134, Thr 136, Arg 337 and Asp 339 according to Fig. 1,

10 or where the molecular complex or binding domain has a root mean square deviation of conserved residue backbone atoms of less than 2Å when superimposed on the relevant backbone atoms described by the structure coordinates of said amino acids.

2. A computer programmed according to claim 1, wherein (a) further comprises the structure coordinates of:

- 15 (i) Arg 45, Gly 109, Ala 111, Ser 131, Ala 133, Lys 238, Asp 240, Ile 250, Asn 251, Ala 252, Phe 253, Phe 294, Gly 296, Met 310, Ile 313, Pro 314, Ala 342, Ala 345, Ala 346 and Val 349 according to Fig. 1; or (b) further comprises the structure coordinates of:
- 20 (ii) Arg 45, Met 49, Asp 80, Ser 131, and Thr 137 according to Fig. 1,

25 or where the molecular complex or binding domain has a root mean square deviation of conserved residue backbone atoms of less than 2Å when superimposed on the relevant backbone atoms described by the structure coordinates of said amino acids, or where the molecular complex or binding domain has conservative amino acid substitutions for those amino acids specified in (i) or (ii).

3. A computer programmed according to claim 1 or claim 2, wherein (a) further comprises the structure coordinates of Ser 338 according to Fig. 1, or (b) further comprises the structure coordinates of Arg 48, Glu 336 and Ser 338

30 according to Fig. 1.

4. A computer according to any of claims 1 to 3, wherein the molecule is Chorismate Synthase.

5. A computer according to any of claims 1 to 4, wherein the molecule is Chorismate Synthase from *S. pneumoniae*.

5 6. A method for identifying the potential of a chemical entity to associate with Chorismate Synthase enzyme, comprising the steps of:

10 a) applying computational means to perform a fitting operation between the chemical entity and the Chorismate Synthase binding domain defined by the structure coordinates defined in any of claims 1 to 3; and

b) analysing the results of the fitting operation to quantify the association.

7. A method according to claim 6, wherein the computational means is provided by a computer as defined in any of claims 1 to 5.

15 8. A method for identifying a potential inhibitor or agent that interacts with a Chorismate Synthase binding domain, comprising the steps of:

(a) using the atomic coordinates defined in any of claims 1 to 3 to generate a three-dimensional structure of a molecule comprising a Chorismate Synthase binding domain;

20 b) employing the three-dimensional structure to design or select the inhibitor or agent;

c) synthesising the inhibitor or agent; and

25 d) contacting the inhibitor or agent with the Chorismate Synthase binding domain to determine the ability of the inhibitor or agent to interact with the domain.

9. A crystal of the binding domain of Chorismate Synthase, wherein the binding domain has a three-dimensional structure characterised by the atomic structure coordinates of Fig. 1.

1/188

Figure 1: Structure coordinates of SpCS-FMN-EPSP complex

	Atom	Res.	Res.	x	y	z	Occ.	Bfac.		
	Type	type	Num.	Coord.	Coord.	Coord.				
ATOM	1	N	MET A	1	-6.060	-0.830	-8.165	1.00	18.18	7 A N
ATOM	2	CA	MET A	1	-7.275	-0.894	-7.281	1.00	18.39	6 A C
ATOM	3	C	MET A	1	-7.528	0.443	-6.595	1.00	17.83	6 A C
ATOM	4	O	MET A	1	-6.603	1.125	-6.107	1.00	18.78	8 A O
ATOM	5	CB	MET A	1	-7.051	-1.937	-6.202	1.00	18.00	6 A C
ATOM	6	CG	MET A	1	-8.364	-2.313	-5.544	1.00	21.91	6 A C
ATOM	7	SE	MET A	1	-8.220	-1.609	-3.830	1.00	49.46	34 A SE
ATOM	8	CE2	MET A	1	-7.157	-2.992	-2.883	1.00	11.46	6 A C
ATOM	9	N	ARG A	2	-8.795	0.827	-6.499	1.00	16.01	7 A N
ATOM	10	CA	ARG A	2	-9.184	2.112	-5.893	1.00	15.07	6 A C
ATOM	11	C	ARG A	2	-10.559	1.918	-5.279	1.00	16.23	6 A C
ATOM	12	O	ARG A	2	-11.183	0.861	-5.472	1.00	15.31	8 A O
ATOM	13	CB	ARG A	2	-9.111	3.102	-7.046	1.00	17.80	6 A C
ATOM	14	CG	ARG A	2	-10.075	2.810	-8.181	1.00	17.14	6 A C
ATOM	15	CD	ARG A	2	-9.864	3.713	-9.408	1.00	22.30	6 A C
ATOM	16	NE	ARG A	2	-10.550	3.088	-10.568	1.00	20.01	7 A N
ATOM	17	CZ	ARG A	2	-10.905	3.780	-11.637	1.00	20.89	6 A C
ATOM	18	NH1	ARG A	2	-11.442	3.047	-12.616	1.00	19.61	7 A N
ATOM	19	NH2	ARG A	2	-10.768	5.098	-11.726	1.00	17.82	7 A N
ATOM	20	N	TYR A	3	-11.084	2.864	-4.536	1.00	15.04	7 A N
ATOM	21	CA	TYR A	3	-12.360	2.660	-3.842	1.00	16.98	6 A C
ATOM	22	C	TYR A	3	-12.872	4.006	-3.319	1.00	15.93	6 A C
ATOM	23	O	TYR A	3	-12.064	4.923	-3.250	1.00	14.19	8 A O
ATOM	24	CB	TYR A	3	-12.121	1.728	-2.639	1.00	18.26	6 A C
ATOM	25	CG	TYR A	3	-11.010	2.145	-1.677	1.00	17.87	6 A C
ATOM	26	CD1	TYR A	3	-11.293	2.865	-0.530	1.00	18.49	6 A C
ATOM	27	CD2	TYR A	3	-9.689	1.811	-1.890	1.00	17.97	6 A C
ATOM	28	CE1	TYR A	3	-10.325	3.271	0.390	1.00	18.85	6 A C
ATOM	29	CE2	TYR A	3	-8.698	2.220	-1.021	1.00	18.30	6 A C
ATOM	30	CZ	TYR A	3	-9.005	2.933	0.119	1.00	19.92	6 A C
ATOM	31	OH	TYR A	3	-8.004	3.373	0.973	1.00	17.54	8 A O
ATOM	32	N	LEU A	4	-14.164	4.042	-3.026	1.00	15.14	7 A N
ATOM	33	CA	LEU A	4	-14.696	5.277	-2.425	1.00	17.87	6 A C
ATOM	34	C	LEU A	4	-15.587	4.798	-1.268	1.00	16.79	6 A C
ATOM	35	O	LEU A	4	-16.248	3.740	-1.423	1.00	12.97	8 A O
ATOM	36	CB	LEU A	4	-15.544	6.158	-3.366	1.00	15.23	6 A C
ATOM	37	CG	LEU A	4	-14.769	6.839	-4.514	1.00	16.10	6 A C
ATOM	38	CD1	LEU A	4	-15.764	7.371	-5.553	1.00	14.19	6 A C
ATOM	39	CD2	LEU A	4	-13.933	8.019	-3.992	1.00	15.76	6 A C
ATOM	40	N	THR A	5	-15.535	5.538	-0.170	1.00	15.64	7 A N
ATOM	41	CA	THR A	5	-16.450	5.170	0.938	1.00	15.73	6 A C
ATOM	42	C	THR A	5	-17.488	6.280	0.998	1.00	17.44	6 A C
ATOM	43	O	THR A	5	-17.183	7.446	0.632	1.00	18.32	8 A O
ATOM	44	CB	THR A	5	-15.808	5.070	2.318	1.00	16.73	6 A C
ATOM	45	OG1	THR A	5	-15.381	6.363	2.762	1.00	16.55	8 A O
ATOM	46	CG2	THR A	5	-14.652	4.089	2.421	1.00	14.82	6 A C
ATOM	47	N	ALA A	6	-18.691	5.980	1.494	1.00	15.64	7 A N
ATOM	48	CA	ALA A	6	-19.702	7.040	1.581	1.00	17.38	6 A C
ATOM	49	C	ALA A	6	-20.709	6.761	2.703	1.00	17.03	6 A C
ATOM	50	O	ALA A	6	-20.811	5.631	3.157	1.00	14.26	8 A O
ATOM	51	CB	ALA A	6	-20.522	7.094	0.274	1.00	13.26	6 A C
ATOM	52	N	GLY A	7	-21.380	7.851	3.103	1.00	18.28	7 A N
ATOM	53	CA	GLY A	7	-22.405	7.642	4.162	1.00	18.92	6 A C
ATOM	54	C	GLY A	7	-22.237	8.625	5.291	1.00	19.75	6 A C
ATOM	55	O	GLY A	7	-21.141	9.155	5.562	1.00	18.09	8 A O
ATOM	56	N	GLU A	8	-23.354	8.865	6.006	1.00	19.78	7 A N
ATOM	57	CA	GLU A	8	-23.285	9.730	7.169	1.00	19.11	6 A C
ATOM	58	C	GLU A	8	-23.468	8.890	8.417	1.00	20.33	6 A C
ATOM	59	O	GLU A	8	-24.220	7.925	8.326	1.00	19.61	8 A O
ATOM	60	CB	GLU A	8	-24.394	10.805	7.129	1.00	21.73	6 A C
ATOM	61	CG	GLU A	8	-24.070	11.871	6.107	1.00	21.23	6 A C
ATOM	62	CD	GLU A	8	-24.258	11.457	4.670	1.00	21.68	6 A C
ATOM	63	OE1	GLU A	8	-25.237	10.787	4.283	1.00	20.69	8 A O
ATOM	64	OE2	GLU A	8	-23.350	11.782	3.871	1.00	22.91	8 A O
ATOM	65	N	SER A	9	-23.024	9.416	9.574	1.00	19.99	7 A N
ATOM	66	CA	SER A	9	-23.176	8.643	10.783	1.00	19.78	6 A C
ATOM	67	C	SER A	9	-24.651	8.343	11.098	1.00	19.97	6 A C
ATOM	68	O	SER A	9	-24.907	7.189	11.517	1.00	17.00	8 A O
ATOM	69	CB	SER A	9	-22.577	9.438	11.965	1.00	21.38	6 A C

2/188

ATOM	70	OG	SER	A	9	-22.788	8.639	13.121	1.00	23.37	8	A	O
ATOM	71	N	HIS	A	10	-25.511	9.343	10.878	1.00	21.53	7	A	N
ATOM	72	CA	HIS	A	10	-26.936	9.109	11.198	1.00	23.96	6	A	C
ATOM	73	C	HIS	A	10	-27.812	8.991	9.953	1.00	26.16	6	A	C
ATOM	74	O	HIS	A	10	-29.042	9.116	9.974	1.00	25.29	8	A	O
ATOM	75	CB	HIS	A	10	-27.529	10.140	12.161	1.00	25.37	6	A	C
ATOM	76	CG	HIS	A	10	-26.636	10.289	13.358	1.00	25.12	6	A	C
ATOM	77	ND1	HIS	A	10	-25.966	11.442	13.642	1.00	24.69	7	A	N
ATOM	78	CD2	HIS	A	10	-26.200	9.354	14.268	1.00	25.15	6	A	C
ATOM	79	CE1	HIS	A	10	-25.231	11.263	14.731	1.00	24.50	6	A	C
ATOM	80	NE2	HIS	A	10	-25.335	9.979	15.082	1.00	24.83	7	A	N
ATOM	81	N	GLY	A	11	-27.140	8.726	8.819	1.00	23.62	7	A	N
ATOM	82	CA	GLY	A	11	-27.833	8.501	7.545	1.00	22.89	6	A	C
ATOM	83	C	GLY	A	11	-28.396	7.070	7.585	1.00	20.44	6	A	C
ATOM	84	O	GLY	A	11	-28.055	6.332	8.489	1.00	21.59	8	A	O
ATOM	85	N	PRO	A	12	-29.094	6.640	6.543	1.00	19.75	7	A	N
ATOM	86	CA	PRO	A	12	-29.625	5.312	6.465	1.00	19.01	6	A	C
ATOM	87	C	PRO	A	12	-28.623	4.193	6.375	1.00	19.62	6	A	C
ATOM	88	O	PRO	A	12	-28.848	3.091	6.901	1.00	17.38	8	A	O
ATOM	89	CB	PRO	A	12	-30.462	5.312	5.163	1.00	20.37	6	A	C
ATOM	90	CG	PRO	A	12	-30.065	6.550	4.443	1.00	21.04	6	A	C
ATOM	91	CD	PRO	A	12	-29.452	7.513	5.396	1.00	16.89	6	A	C
ATOM	92	N	ARG	A	13	-27.494	4.457	5.660	1.00	19.50	7	A	N
ATOM	93	CA	ARG	A	13	-26.534	3.381	5.523	1.00	21.15	6	A	C
ATOM	94	C	ARG	A	13	-25.185	3.874	4.970	1.00	20.34	6	A	C
ATOM	95	O	ARG	A	13	-25.050	5.002	4.528	1.00	20.50	8	A	O
ATOM	96	CB	ARG	A	13	-27.099	2.288	4.652	1.00	24.65	6	A	C
ATOM	97	CG	ARG	A	13	-27.235	2.456	3.200	1.00	27.56	6	A	C
ATOM	98	CD	ARG	A	13	-27.024	1.125	2.428	1.00	24.91	6	A	C
ATOM	99	NE	ARG	A	13	-26.508	1.558	1.120	1.00	23.46	7	A	N
ATOM	100	CZ	ARG	A	13	-27.151	1.721	-0.031	1.00	23.16	6	A	C
ATOM	101	NH1	ARG	A	13	-28.426	1.414	-0.206	1.00	15.34	7	A	N
ATOM	102	NH2	ARG	A	13	-26.416	2.164	-1.054	1.00	21.02	7	A	N
ATOM	103	N	LEU	A	14	-24.211	3.024	5.102	1.00	19.79	7	A	N
ATOM	104	CA	LEU	A	14	-22.844	3.310	4.646	1.00	17.92	6	A	C
ATOM	105	C	LEU	A	14	-22.636	2.434	3.419	1.00	19.37	6	A	C
ATOM	106	O	LEU	A	14	-23.178	1.314	3.299	1.00	18.50	8	A	O
ATOM	107	CB	LEU	A	14	-21.747	3.015	5.670	1.00	18.88	6	A	C
ATOM	108	CG	LEU	A	14	-22.067	3.405	7.124	1.00	19.79	6	A	C
ATOM	109	CD1	LEU	A	14	-20.962	2.946	8.066	1.00	18.24	6	A	C
ATOM	110	CD2	LEU	A	14	-22.299	4.915	7.282	1.00	18.15	6	A	C
ATOM	111	N	THR	A	15	-21.805	2.978	2.527	1.00	18.94	7	A	N
ATOM	112	CA	THR	A	15	-21.574	2.254	1.279	1.00	17.33	6	A	C
ATOM	113	C	THR	A	15	-20.128	2.404	0.856	1.00	16.45	6	A	C
ATOM	114	O	THR	A	15	-19.490	3.422	1.119	1.00	17.15	8	A	O
ATOM	115	CB	THR	A	15	-22.483	2.852	0.165	1.00	18.56	6	A	C
ATOM	116	OG1	THR	A	15	-23.862	2.925	0.550	1.00	16.96	8	A	O
ATOM	117	CG2	THR	A	15	-22.409	1.960	-1.098	1.00	18.15	6	A	C
ATOM	118	N	ALA	A	16	-19.611	1.380	0.218	1.00	17.12	7	A	N
ATOM	119	CA	ALA	A	16	-18.268	1.518	-0.352	1.00	18.27	6	A	C
ATOM	120	C	ALA	A	16	-18.311	0.821	-1.725	1.00	18.25	6	A	C
ATOM	121	O	ALA	A	16	-18.935	-0.235	-1.785	1.00	21.03	8	A	O
ATOM	122	CB	ALA	A	16	-17.234	0.869	0.518	1.00	16.73	6	A	C
ATOM	123	N	ILE	A	17	-17.498	1.272	-2.675	1.00	18.33	7	A	N
ATOM	124	CA	ILE	A	17	-17.323	0.593	-3.932	1.00	18.63	6	A	C
ATOM	125	C	ILE	A	17	-15.793	0.459	-4.129	1.00	20.19	6	A	C
ATOM	126	O	ILE	A	17	-15.077	1.444	-3.948	1.00	17.57	8	A	O
ATOM	127	CB	ILE	A	17	-17.893	1.307	-5.158	1.00	19.55	6	A	C
ATOM	128	CG1	ILE	A	17	-19.421	1.367	-5.043	1.00	17.24	6	A	C
ATOM	129	CG2	ILE	A	17	-17.444	0.641	-6.480	1.00	18.22	6	A	C
ATOM	130	CD1	ILE	A	17	-19.959	2.548	-5.880	1.00	20.94	6	A	C
ATOM	131	N	ILE	A	18	-15.383	-0.739	-4.461	1.00	17.35	7	A	N
ATOM	132	CA	ILE	A	18	-13.969	-1.035	-4.711	1.00	18.38	6	A	C
ATOM	133	C	ILE	A	18	-13.905	-1.436	-6.211	1.00	19.35	6	A	C
ATOM	134	O	ILE	A	18	-14.539	-2.356	-6.644	1.00	18.10	8	A	O
ATOM	135	CB	ILE	A	18	-13.488	-2.258	-3.938	1.00	17.43	6	A	C
ATOM	136	CG1	ILE	A	18	-13.862	-2.203	-2.427	1.00	16.01	6	A	C
ATOM	137	CG2	ILE	A	18	-11.985	-2.412	-4.079	1.00	21.23	6	A	C
ATOM	138	CD1	ILE	A	18	-13.378	-3.453	-1.707	1.00	17.42	6	A	C
ATOM	139	N	GLU	A	19	-13.005	-0.836	-6.930	1.00	21.03	7	A	N
ATOM	140	CA	GLU	A	19	-12.823	-1.117	-8.350	1.00	20.70	6	A	C
ATOM	141	C	GLU	A	19	-11.417	-1.649	-8.515	1.00	19.23	6	A	C
ATOM	142	O	GLU	A	19	-10.471	-1.029	-7.998	1.00	18.24	8	A	O
ATOM	143	CB	GLU	A	19	-13.031	0.172	-9.176	1.00	19.03	6	A	C
ATOM	144	CG	GLU	A	19	-13.280	-0.057	-10.670	1.00	17.55	6	A	C
ATOM	145	CD	GLU	A	19	-11.999	-0.364	-11.427	1.00	17.65	6	A	C
ATOM	146	OE1	GLU	A	19	-11.064	0.461	-11.306	1.00	16.89	8	A	O
ATOM	147	OE2	GLU	A	19	-11.924	-1.397	-12.112	1.00	16.58	8	A	O
ATOM	148	N	GLY	A	20	-11.325	-2.781	-9.195	1.00	20.69	7	A	N

3/188

ATOM	149	CA	GLY	A	20	-10.000	-3.288	-9.536	1.00	21.18	6	A	C
ATOM	150	C	GLY	A	20	-9.523	-4.488	-8.716	1.00	20.63	6	A	C
ATOM	151	O	GLY	A	20	-8.331	-4.753	-8.824	1.00	20.20	8	A	O
ATOM	152	N	ILE	A	21	-10.388	-5.202	-8.030	1.00	18.92	7	A	N
ATOM	153	CA	ILE	A	21	-9.973	-6.421	-7.327	1.00	19.44	6	A	C
ATOM	154	C	ILE	A	21	-9.943	-7.509	-8.432	1.00	20.03	6	A	C
ATOM	155	O	ILE	A	21	-10.853	-7.567	-9.250	1.00	16.46	8	A	O
ATOM	156	CB	ILE	A	21	-10.978	-6.803	-6.255	1.00	20.96	6	A	C
ATOM	157	CG1	ILE	A	21	-11.021	-5.739	-5.111	1.00	19.51	6	A	C
ATOM	158	CG2	ILE	A	21	-10.744	-8.151	-5.628	1.00	16.94	6	A	C
ATOM	159	CD1	ILE	A	21	-9.749	-5.687	-4.265	1.00	17.88	6	A	C
ATOM	160	N	PRO	A	22	-8.917	-8.334	-8.466	1.00	18.68	7	A	N
ATOM	161	CA	PRO	A	22	-8.814	-9.399	-9.434	1.00	20.38	6	A	C
ATOM	162	C	PRO	A	22	-10.037	-10.354	-9.370	1.00	20.49	6	A	C
ATOM	163	O	PRO	A	22	-10.588	-10.615	-8.295	1.00	19.40	8	A	O
ATOM	164	CB	PRO	A	22	-7.632	-10.241	-8.986	1.00	17.49	6	A	C
ATOM	165	CG	PRO	A	22	-6.905	-9.398	-7.995	1.00	19.83	6	A	C
ATOM	166	CD	PRO	A	22	-7.860	-8.379	-7.442	1.00	18.63	6	A	C
ATOM	167	N	ALA	A	23	-10.402	-10.852	-10.548	1.00	18.77	7	A	N
ATOM	168	CA	ALA	A	23	-11.455	-11.897	-10.589	1.00	19.05	6	A	C
ATOM	169	C	ALA	A	23	-10.943	-13.156	-9.917	1.00	20.02	6	A	C
ATOM	170	O	ALA	A	23	-9.719	-13.395	-9.886	1.00	19.83	8	A	O
ATOM	171	CB	ALA	A	23	-11.643	-12.214	-12.086	1.00	18.92	6	A	C
ATOM	172	N	GLY	A	24	-11.825	-13.977	-9.296	1.00	20.58	7	A	N
ATOM	173	CA	GLY	A	24	-11.323	-15.259	-8.782	1.00	19.32	6	A	C
ATOM	174	C	GLY	A	24	-10.989	-15.325	-7.321	1.00	20.43	6	A	C
ATOM	175	O	GLY	A	24	-10.663	-16.402	-6.816	1.00	19.46	8	A	O
ATOM	176	N	LEU	A	25	-11.189	-14.219	-6.576	1.00	19.49	7	A	N
ATOM	177	CA	LEU	A	25	-10.910	-14.250	-5.163	1.00	20.18	6	A	C
ATOM	178	C	LEU	A	25	-12.083	-14.749	-4.340	1.00	20.05	6	A	C
ATOM	179	O	LEU	A	25	-13.143	-14.143	-4.372	1.00	21.33	8	A	O
ATOM	180	CB	LEU	A	25	-10.589	-12.832	-4.655	1.00	20.94	6	A	C
ATOM	181	CG	LEU	A	25	-10.213	-12.656	-3.175	1.00	23.55	6	A	C
ATOM	182	CD1	LEU	A	25	-8.875	-13.337	-2.889	1.00	21.68	6	A	C
ATOM	183	CD2	LEU	A	25	-10.168	-11.123	-2.931	1.00	21.25	6	A	C
ATOM	184	N	PRO	A	26	-11.883	-15.786	-3.556	1.00	21.78	7	A	N
ATOM	185	CA	PRO	A	26	-12.937	-16.315	-2.700	1.00	22.71	6	A	C
ATOM	186	C	PRO	A	26	-13.259	-15.213	-1.696	1.00	21.64	6	A	C
ATOM	187	O	PRO	A	26	-12.303	-14.706	-1.079	1.00	18.70	8	A	O
ATOM	188	CB	PRO	A	26	-12.305	-17.533	-2.005	1.00	21.09	6	A	C
ATOM	189	CG	PRO	A	26	-11.315	-17.931	-3.097	1.00	23.64	6	A	C
ATOM	190	CD	PRO	A	26	-10.658	-16.620	-3.489	1.00	21.14	6	A	C
ATOM	191	N	LEU	A	27	-14.542	-14.904	-1.516	1.00	21.23	7	A	N
ATOM	192	CA	LEU	A	27	-14.911	-13.796	-0.617	1.00	19.96	6	A	C
ATOM	193	C	LEU	A	27	-16.324	-13.979	-0.136	1.00	19.73	6	A	C
ATOM	194	O	LEU	A	27	-17.186	-14.281	-1.001	1.00	21.39	8	A	O
ATOM	195	CB	LEU	A	27	-14.830	-12.484	-1.446	1.00	21.56	6	A	C
ATOM	196	CG	LEU	A	27	-15.159	-11.199	-0.692	1.00	23.11	6	A	C
ATOM	197	CD1	LEU	A	27	-14.135	-10.963	0.434	1.00	23.44	6	A	C
ATOM	198	CD2	LEU	A	27	-15.217	-9.939	-1.577	1.00	21.46	6	A	C
ATOM	199	N	THR	A	28	-16.561	-13.885	1.164	1.00	20.25	7	A	N
ATOM	200	CA	THR	A	28	-17.910	-14.047	1.692	1.00	22.60	6	A	C
ATOM	201	C	THR	A	28	-18.258	-12.927	2.661	1.00	22.09	6	A	C
ATOM	202	O	THR	A	28	-17.334	-12.312	3.215	1.00	21.52	8	A	O
ATOM	203	CB	THR	A	28	-18.043	-15.364	2.509	1.00	24.27	6	A	C
ATOM	204	OG1	THR	A	28	-17.175	-15.270	3.618	1.00	22.05	8	A	O
ATOM	205	CG2	THR	A	28	-17.690	-16.559	1.617	1.00	24.63	6	A	C
ATOM	206	N	ALA	A	29	-19.543	-12.759	2.987	1.00	21.83	7	A	N
ATOM	207	CA	ALA	A	29	-19.907	-11.754	3.989	1.00	22.31	6	A	C
ATOM	208	C	ALA	A	29	-19.145	-11.951	5.298	1.00	22.40	6	A	C
ATOM	209	O	ALA	A	29	-18.710	-10.969	5.908	1.00	20.17	8	A	O
ATOM	210	CB	ALA	A	29	-21.422	-11.792	4.248	1.00	22.95	6	A	C
ATOM	211	N	GLU	A	30	-18.981	-13.194	5.770	1.00	22.62	7	A	N
ATOM	212	CA	GLU	A	30	-18.280	-13.441	7.031	1.00	23.49	6	A	C
ATOM	213	C	GLU	A	30	-16.832	-12.971	6.951	1.00	23.09	6	A	C
ATOM	214	O	GLU	A	30	-16.294	-12.536	7.973	1.00	23.84	8	A	O
ATOM	215	CB	GLU	A	30	-18.340	-14.938	7.433	1.00	27.10	6	A	C
ATOM	216	CG	GLU	A	30	-17.627	-15.353	8.693	1.00	30.01	6	A	C
ATOM	217	CD	GLU	A	30	-17.933	-14.552	9.952	1.00	30.82	6	A	C
ATOM	218	OE1	GLU	A	30	-17.162	-14.577	10.929	1.00	32.27	8	A	O
ATOM	219	OE2	GLU	A	30	-18.928	-13.828	10.075	1.00	28.92	8	A	O
ATOM	220	N	ASP	A	31	-16.200	-13.027	5.772	1.00	22.16	7	A	N
ATOM	221	CA	ASP	A	31	-14.825	-12.505	5.668	1.00	23.15	6	A	C
ATOM	222	C	ASP	A	31	-14.825	-11.054	6.153	1.00	24.15	6	A	C
ATOM	223	O	ASP	A	31	-13.919	-10.596	6.814	1.00	26.65	8	A	O
ATOM	224	CB	ASP	A	31	-14.303	-12.565	4.224	1.00	22.36	6	A	C
ATOM	225	CG	ASP	A	31	-14.076	-14.010	3.792	1.00	23.75	6	A	C
ATOM	226	OD1	ASP	A	31	-13.785	-14.818	4.697	1.00	23.76	8	A	O
ATOM	227	OD2	ASP	A	31	-14.155	-14.333	2.587	1.00	23.81	8	A	O

4/188

ATOM	228	N	ILE	A	32	-15.809	-10.264	5.760	1.00	22.64	7	A	N
ATOM	229	CA	ILE	A	32	-15.933	-8.879	6.173	1.00	21.78	6	A	C
ATOM	230	C	ILE	A	32	-16.418	-8.733	7.609	1.00	20.59	6	A	C
ATOM	231	O	ILE	A	32	-15.902	-7.961	8.425	1.00	18.76	8	A	O
ATOM	232	CB	ILE	A	32	-16.960	-8.185	5.240	1.00	20.48	6	A	C
ATOM	233	CG1AILE	A	32		-16.775	-8.473	3.742	0.75	19.04	6	A	C
ATOM	234	CG1BILE	A	32		-16.395	-8.233	3.814	0.25	21.08	6	A	C
ATOM	235	CG2AILE	A	32		-16.966	-6.674	5.499	0.75	19.83	6	A	C
ATOM	236	CG2BILE	A	32		-17.227	-6.753	5.680	0.25	20.80	6	A	C
ATOM	237	CD1AILE	A	32		-15.405	-8.225	3.134	0.75	14.38	6	A	C
ATOM	238	CD1BILE	A	32		-17.398	-7.681	2.836	0.25	20.06	6	A	C
ATOM	239	N	ASN	A	33	-17.509	-9.438	7.899	1.00	20.99	7	A	N
ATOM	240	CA	ASN	A	33	-18.168	-9.337	9.212	1.00	22.72	6	A	C
ATOM	241	C	ASN	A	33	-17.234	-9.584	10.386	1.00	21.84	6	A	C
ATOM	242	O	ASN	A	33	-17.321	-8.897	11.400	1.00	19.26	8	A	O
ATOM	243	CB	ASN	A	33	-19.381	-10.278	9.273	1.00	23.03	6	A	C
ATOM	244	CG	ASN	A	33	-20.526	-9.887	8.360	1.00	21.87	6	A	C
ATOM	245	OD1	ASN	A	33	-20.525	-8.812	7.784	1.00	21.21	8	A	O
ATOM	246	ND2	ASN	A	33	-21.540	-10.719	8.138	1.00	20.67	7	A	N
ATOM	247	N	GLU	A	34	-16.276	-10.492	10.257	1.00	24.14	7	A	N
ATOM	248	CA	GLU	A	34	-15.347	-10.697	11.392	1.00	27.03	6	A	C
ATOM	249	C	GLU	A	34	-14.626	-9.406	11.761	1.00	26.28	6	A	C
ATOM	250	O	GLU	A	34	-14.483	-9.032	12.933	1.00	24.13	8	A	O
ATOM	251	CB	GLU	A	34	-14.304	-11.747	11.013	1.00	30.13	6	A	C
ATOM	252	CG	AGLU	A	34	-13.433	-12.208	12.178	0.75	35.65	6	A	C
ATOM	253	CG	BGLU	A	34	-14.805	-13.153	11.096	0.25	29.86	6	A	C
ATOM	254	CD	AGLU	A	34	-12.158	-12.881	11.686	0.75	39.50	6	A	C
ATOM	255	CD	BGLU	A	34	-14.197	-14.319	10.379	0.25	30.28	6	A	C
ATOM	256	OE1AGLU	A	34		-11.118	-12.794	12.387	0.75	42.31	8	A	O
ATOM	257	OE1BGLU	A	34		-13.112	-14.254	9.774	0.25	28.99	8	A	O
ATOM	258	OE2AGLU	A	34		-12.184	-13.476	10.581	0.75	40.23	8	A	O
ATOM	259	OE2BGLU	A	34		-14.856	-15.401	10.423	0.25	30.29	8	A	O
ATOM	260	N	ASP	A	35	-14.197	-8.679	10.726	1.00	24.67	7	A	N
ATOM	261	CA	ASP	A	35	-13.490	-7.428	10.983	1.00	22.12	6	A	C
ATOM	262	C	ASP	A	35	-14.447	-6.379	11.546	1.00	20.04	6	A	C
ATOM	263	O	ASP	A	35	-14.027	-5.574	12.392	1.00	20.02	8	A	O
ATOM	264	CB	ASP	A	35	-12.689	-6.977	9.771	1.00	22.02	6	A	C
ATOM	265	CG	ASP	A	35	-11.364	-7.738	9.620	1.00	23.71	6	A	C
ATOM	266	OD1	ASP	A	35	-11.083	-8.531	10.524	1.00	24.96	8	A	O
ATOM	267	OD2	ASP	A	35	-10.561	-7.584	8.668	1.00	21.44	8	A	O
ATOM	268	N	LEU	A	36	-15.614	-6.226	10.924	1.00	16.24	7	A	N
ATOM	269	CA	LEU	A	36	-16.592	-5.296	11.415	1.00	18.76	6	A	C
ATOM	270	C	LEU	A	36	-16.909	-5.523	12.886	1.00	21.58	6	A	C
ATOM	271	O	LEU	A	36	-17.017	-4.556	13.648	1.00	21.97	8	A	O
ATOM	272	CB	LEU	A	36	-17.842	-5.456	10.546	1.00	17.42	6	A	C
ATOM	273	CG	LEU	A	36	-17.711	-5.093	9.082	1.00	15.35	6	A	C
ATOM	274	CD1	LEU	A	36	-19.039	-5.229	8.364	1.00	16.59	6	A	C
ATOM	275	CD2	LEU	A	36	-17.213	-3.661	8.886	1.00	16.19	6	A	C
ATOM	276	N	ARG	A	37	-16.988	-6.781	13.339	1.00	21.20	7	A	N
ATOM	277	CA	ARG	A	37	-17.237	-7.030	14.773	1.00	22.70	6	A	C
ATOM	278	C	ARG	A	37	-16.050	-6.545	15.621	1.00	22.30	6	A	C
ATOM	279	O	ARG	A	37	-16.256	-5.882	16.671	1.00	18.84	8	A	O
ATOM	280	CB	ARG	A	37	-17.517	-8.516	15.030	1.00	26.54	6	A	C
ATOM	281	CG	ARG	A	37	-18.894	-8.932	14.549	1.00	30.93	6	A	C
ATOM	282	CD	ARG	A	37	-19.267	-10.363	14.842	1.00	35.76	6	A	C
ATOM	283	NE	ARG	A	37	-18.235	-11.342	14.547	1.00	39.86	7	A	N
ATOM	284	CZ	ARG	A	37	-18.092	-12.129	13.485	1.00	40.79	6	A	C
ATOM	285	NH1	ARG	A	37	-17.052	-12.954	13.455	1.00	41.48	7	A	N
ATOM	286	NH2	ARG	A	37	-18.964	-12.088	12.491	1.00	39.95	7	A	N
ATOM	287	N	ARG	A	38	-14.811	-6.791	15.140	1.00	20.65	7	A	N
ATOM	288	CA	ARG	A	38	-13.639	-6.331	15.907	1.00	23.18	6	A	C
ATOM	289	C	ARG	A	38	-13.669	-4.822	16.063	1.00	22.63	6	A	C
ATOM	290	O	ARG	A	38	-13.312	-4.286	17.126	1.00	22.98	8	A	O
ATOM	291	CB	ARG	A	38	-12.321	-6.831	15.283	1.00	24.08	6	A	C
ATOM	292	CG	ARG	A	38	-12.201	-8.374	15.375	1.00	26.88	6	A	C
ATOM	293	CD	ARG	A	38	-11.010	-8.874	14.556	1.00	32.00	6	A	C
ATOM	294	NE	ARG	A	38	-9.741	-8.298	14.926	1.00	33.81	7	A	N
ATOM	295	CZ	ARG	A	38	-8.621	-8.083	14.253	1.00	36.27	6	A	C
ATOM	296	NH1	ARG	A	38	-7.568	-7.541	14.874	1.00	36.76	7	A	N
ATOM	297	NH2	ARG	A	38	-8.467	-8.381	12.971	1.00	35.64	7	A	N
ATOM	298	N	ARG	A	39	-14.062	-4.103	15.013	1.00	20.66	7	A	N
ATOM	299	CA	ARG	A	39	-14.042	-2.660	14.962	1.00	21.04	6	A	C
ATOM	300	C	ARG	A	39	-15.066	-2.021	15.892	1.00	22.83	6	A	C
ATOM	301	O	ARG	A	39	-14.877	-0.914	16.399	1.00	22.32	8	A	O
ATOM	302	CB	ARG	A	39	-14.290	-2.144	13.504	1.00	19.99	6	A	C
ATOM	303	CG	ARG	A	39	-13.939	-0.633	13.421	1.00	19.95	6	A	C
ATOM	304	CD	ARG	A	39	-14.680	-0.044	12.193	1.00	18.79	6	A	C
ATOM	305	NE	ARG	A	39	-16.084	-0.061	12.605	1.00	20.96	7	A	N
ATOM	306	CZ	ARG	A	39	-16.684	0.901	13.295	1.00	19.61	6	A	C

5/188

ATOM	307	NH1	ARG	A	39	-16.048	2.012	13.586	1.00	16.96	7	A	N
ATOM	308	NH2	ARG	A	39	-17.951	0.701	13.654	1.00	22.31	7	A	N
ATOM	309	N	GLN	A	40	-16.171	-2.683	16.175	1.00	24.04	7	A	N
ATOM	310	CA	GLN	A	40	-17.161	-2.194	17.126	1.00	27.74	6	A	C
ATOM	311	C	GLN	A	40	-16.702	-2.461	18.575	1.00	29.28	6	A	C
ATOM	312	O	GLN	A	40	-17.218	-1.909	19.525	1.00	28.43	8	A	O
ATOM	313	CB	GLN	A	40	-18.479	-2.962	16.897	1.00	27.62	6	A	C
ATOM	314	CG	GLN	A	40	-19.263	-2.391	15.717	1.00	28.25	6	A	C
ATOM	315	CD	GLN	A	40	-20.683	-2.996	15.776	1.00	30.95	6	A	C
ATOM	316	OE1	GLN	A	40	-20.906	-4.013	15.136	1.00	28.76	8	A	O
ATOM	317	NE2	GLN	A	40	-21.545	-2.352	16.560	1.00	30.60	7	A	N
ATOM	318	N	GLY	A	41	-15.726	-3.338	18.780	1.00	28.49	7	A	N
ATOM	319	CA	GLY	A	41	-15.298	-3.769	20.091	1.00	27.95	6	A	C
ATOM	320	C	GLY	A	41	-14.255	-2.856	20.748	1.00	27.27	6	A	C
ATOM	321	O	GLY	A	41	-13.899	-1.784	20.274	1.00	24.30	8	A	O
ATOM	322	N	GLY	A	42	-13.759	-3.293	21.910	1.00	26.35	7	A	N
ATOM	323	CA	GLY	A	42	-12.864	-2.498	22.713	1.00	25.44	6	A	C
ATOM	324	C	GLY	A	42	-13.532	-1.972	23.970	1.00	27.58	6	A	C
ATOM	325	O	GLY	A	42	-14.523	-1.227	23.962	1.00	25.06	8	A	O
ATOM	326	N	TYR	A	43	-12.916	-2.347	25.109	1.00	26.06	7	A	N
ATOM	327	CA	TYR	A	43	-13.364	-1.781	26.394	1.00	26.76	6	A	C
ATOM	328	C	TYR	A	43	-13.266	-0.271	26.334	1.00	25.97	6	A	C
ATOM	329	O	TYR	A	43	-12.233	0.318	25.907	1.00	27.09	8	A	O
ATOM	330	CB	TYR	A	43	-12.529	-2.418	27.521	1.00	26.46	6	A	C
ATOM	331	CG	TYR	A	43	-13.112	-2.103	28.888	1.00	28.50	6	A	C
ATOM	332	CD1	TYR	A	43	-14.179	-2.855	29.379	1.00	29.11	6	A	C
ATOM	333	CD2	TYR	A	43	-12.633	-1.047	29.647	1.00	27.95	6	A	C
ATOM	334	CE1	TYR	A	43	-14.752	-2.562	30.617	1.00	30.22	6	A	C
ATOM	335	CE2	TYR	A	43	-13.199	-0.741	30.875	1.00	28.27	6	A	C
ATOM	336	CZ	TYR	A	43	-14.253	-1.501	31.357	1.00	30.40	6	A	C
ATOM	337	OH	TYR	A	43	-14.791	-1.192	32.595	1.00	31.07	8	A	O
ATOM	338	N	GLY	A	44	-14.314	0.411	26.762	1.00	24.15	7	A	N
ATOM	339	CA	GLY	A	44	-14.328	1.888	26.709	1.00	27.31	6	A	C
ATOM	340	C	GLY	A	44	-15.324	2.367	25.652	1.00	28.21	6	A	C
ATOM	341	O	GLY	A	44	-15.749	3.531	25.658	1.00	30.72	8	A	O
ATOM	342	N	ARG	A	45	-15.688	1.503	24.702	1.00	27.64	7	A	N
ATOM	343	CA	ARG	A	45	-16.654	1.908	23.691	1.00	29.70	6	A	C
ATOM	344	C	ARG	A	45	-18.050	1.659	24.285	1.00	32.11	6	A	C
ATOM	345	O	ARG	A	45	-18.292	0.578	24.808	1.00	31.22	8	A	O
ATOM	346	CB	ARG	A	45	-16.530	1.180	22.358	1.00	29.43	6	A	C
ATOM	347	CG	ARG	A	45	-15.181	1.317	21.668	1.00	28.94	6	A	C
ATOM	348	CD	ARG	A	45	-15.292	1.308	20.150	1.00	29.26	6	A	C
ATOM	349	NE	ARG	A	45	-15.689	2.575	19.570	1.00	26.32	7	A	N
ATOM	350	CZ	ARG	A	45	-15.955	2.787	18.294	1.00	26.16	6	A	C
ATOM	351	NH1	ARG	A	45	-15.900	1.801	17.398	1.00	24.85	7	A	N
ATOM	352	NH2	ARG	A	45	-16.418	3.968	17.895	1.00	26.80	7	A	N
ATOM	353	N	GLY	A	46	-18.936	2.634	24.170	1.00	34.35	7	A	N
ATOM	354	CA	GLY	A	46	-20.251	2.367	24.755	1.00	39.80	6	A	C
ATOM	355	C	GLY	A	46	-21.421	2.452	23.806	1.00	42.03	6	A	C
ATOM	356	O	GLY	A	46	-21.627	1.600	22.947	1.00	43.58	8	A	O
ATOM	357	N	GLY	A	47	-22.276	3.429	24.075	1.00	42.35	7	A	N
ATOM	358	CA	GLY	A	47	-23.495	3.737	23.378	1.00	43.91	6	A	C
ATOM	359	C	GLY	A	47	-23.852	3.079	22.066	1.00	40.99	6	A	C
ATOM	360	O	GLY	A	47	-24.361	1.968	21.924	1.00	42.86	8	A	O
ATOM	361	N	ARG	A	48	-23.610	3.828	21.007	1.00	41.17	7	A	N
ATOM	362	CA	ARG	A	48	-23.853	3.366	19.639	1.00	37.18	6	A	C
ATOM	363	C	ARG	A	48	-23.455	1.910	19.425	1.00	36.96	6	A	C
ATOM	364	O	ARG	A	48	-24.139	1.171	18.699	1.00	35.29	8	A	O
ATOM	365	CB	ARG	A	48	-22.942	4.274	18.831	1.00	38.68	6	A	C
ATOM	366	CG	ARG	A	48	-23.237	4.422	17.366	1.00	36.50	6	A	C
ATOM	367	CD	ARG	A	48	-24.573	5.055	17.055	1.00	35.86	6	A	C
ATOM	368	NE	ARG	A	48	-24.853	4.753	15.655	1.00	36.24	7	A	N
ATOM	369	CZ	ARG	A	48	-24.523	5.488	14.597	1.00	35.64	6	A	C
ATOM	370	NH1	ARG	A	48	-24.814	4.984	13.403	1.00	35.67	7	A	N
ATOM	371	NH2	ARG	A	48	-23.966	6.675	14.776	1.00	33.07	7	A	N
ATOM	372	N	MET	A	49	-22.306	1.504	19.980	1.00	34.26	7	A	N
ATOM	373	CA	MET	A	49	-21.735	0.202	19.685	1.00	36.54	6	A	C
ATOM	374	C	MET	A	49	-22.570	-0.951	20.222	1.00	38.96	6	A	C
ATOM	375	O	MET	A	49	-22.261	-2.097	19.924	1.00	37.16	8	A	O
ATOM	376	CB	MET	A	49	-20.294	0.084	20.177	1.00	36.71	6	A	C
ATOM	377	CG	MET	A	49	-19.413	1.232	19.667	1.00	36.59	6	A	C
ATOM	378	SE	MET	A	49	-19.416	0.659	17.613	1.00	51.42	34	A	SE
ATOM	379	CE2	MET	A	49	-21.038	1.850	16.989	1.00	31.77	6	A	C
ATOM	380	N	GLY	A	50	-23.588	-0.606	21.017	1.00	41.34	7	A	N
ATOM	381	CA	GLY	A	50	-24.495	-1.599	21.583	1.00	43.48	6	A	C
ATOM	382	C	GLY	A	50	-25.765	-1.669	20.722	1.00	44.90	6	A	C
ATOM	383	O	GLY	A	50	-26.362	-2.742	20.625	1.00	46.64	8	A	O
ATOM	384	N	ILE	A	51	-26.141	-0.566	20.095	1.00	44.47	7	A	N
ATOM	385	CA	ILE	A	51	-27.224	-0.531	19.132	1.00	44.78	6	A	C

6/188

ATOM	386	C	ILE	A	51	-26.811	-1.115	17.780	1.00	43.31	6	A	C
ATOM	387	O	ILE	A	51	-27.468	-2.001	17.222	1.00	45.46	8	A	O
ATOM	388	CB	ILE	A	51	-27.669	0.922	18.849	1.00	46.88	6	A	C
ATOM	389	CG1	ILE	A	51	-27.871	1.738	20.121	1.00	47.46	6	A	C
ATOM	390	CG2	ILE	A	51	-28.944	0.915	18.004	1.00	47.25	6	A	C
ATOM	391	CD1	ILE	A	51	-28.020	3.233	19.873	1.00	48.15	6	A	C
ATOM	392	N	GLU	A	52	-25.750	-0.588	17.165	1.00	38.88	7	A	N
ATOM	393	CA	GLU	A	52	-25.310	-1.075	15.855	1.00	35.49	6	A	C
ATOM	394	C	GLU	A	52	-24.888	-2.542	15.940	1.00	33.05	6	A	C
ATOM	395	O	GLU	A	52	-24.152	-2.961	16.851	1.00	32.75	8	A	O
ATOM	396	CB	GLU	A	52	-24.165	-0.245	15.253	1.00	32.35	6	A	C
ATOM	397	CG	GLU	A	52	-24.478	1.235	15.040	1.00	31.18	6	A	C
ATOM	398	CD	GLU	A	52	-25.652	1.491	14.106	1.00	31.20	6	A	C
ATOM	399	OE1	GLU	A	52	-26.221	2.600	14.065	1.00	29.70	8	A	O
ATOM	400	OE2	GLU	A	52	-26.045	0.570	13.349	1.00	29.28	8	A	O
ATOM	401	N	ASN	A	53	-25.239	-3.304	14.922	1.00	30.71	7	A	N
ATOM	402	CA	ASN	A	53	-24.764	-4.681	14.756	1.00	31.27	6	A	C
ATOM	403	C	ASN	A	53	-24.260	-4.747	13.297	1.00	29.06	6	A	C
ATOM	404	O	ASN	A	53	-25.003	-5.190	12.417	1.00	27.69	8	A	O
ATOM	405	CB	ASN	A	53	-25.870	-5.674	15.050	1.00	35.23	6	A	C
ATOM	406	CG	ASN	A	53	-25.410	-7.108	15.034	1.00	39.26	6	A	C
ATOM	407	OD1	ASN	A	53	-24.247	-7.384	14.738	1.00	40.69	8	A	O
ATOM	408	ND2	ASN	A	53	-26.313	-8.048	15.350	1.00	40.53	7	A	N
ATOM	409	N	ASP	A	54	-23.017	-4.322	13.056	1.00	23.16	7	A	N
ATOM	410	CA	ASP	A	54	-22.523	-4.142	11.695	1.00	24.23	6	A	C
ATOM	411	C	ASP	A	54	-22.394	-5.410	10.884	1.00	22.90	6	A	C
ATOM	412	O	ASP	A	54	-21.570	-6.238	11.215	1.00	21.82	8	A	O
ATOM	413	CB	ASP	A	54	-21.171	-3.392	11.704	1.00	22.92	6	A	C
ATOM	414	CG	ASP	A	54	-21.365	-1.962	12.186	1.00	22.63	6	A	C
ATOM	415	OD1	ASP	A	54	-22.499	-1.455	12.162	1.00	23.21	8	A	O
ATOM	416	OD2	ASP	A	54	-20.394	-1.300	12.608	1.00	24.27	8	A	O
ATOM	417	N	GLN	A	55	-23.136	-5.558	9.815	1.00	23.54	7	A	N
ATOM	418	CA	GLN	A	55	-22.970	-6.690	8.915	1.00	25.97	6	A	C
ATOM	419	C	GLN	A	55	-23.057	-6.185	7.471	1.00	24.51	6	A	C
ATOM	420	O	GLN	A	55	-23.888	-5.338	7.152	1.00	23.49	8	A	O
ATOM	421	CB	GLN	A	55	-24.065	-7.722	9.160	1.00	30.21	6	A	C
ATOM	422	CG	GLN	A	55	-24.108	-8.190	10.604	1.00	37.06	6	A	C
ATOM	423	CD	GLN	A	55	-24.961	-9.430	10.769	1.00	41.28	6	A	C
ATOM	424	OE1	GLN	A	55	-26.162	-9.414	10.509	1.00	43.52	8	A	O
ATOM	425	NE2	GLN	A	55	-24.304	-10.509	11.202	1.00	44.66	7	A	N
ATOM	426	N	VAL	A	56	-22.282	-6.789	6.586	1.00	22.85	7	A	N
ATOM	427	CA	VAL	A	56	-22.266	-6.305	5.212	1.00	21.58	6	A	C
ATOM	428	C	VAL	A	56	-23.253	-6.981	4.280	1.00	22.28	6	A	C
ATOM	429	O	VAL	A	56	-23.620	-8.151	4.392	1.00	20.28	8	A	O
ATOM	430	CB	VAL	A	56	-20.831	-6.540	4.649	1.00	23.65	6	A	C
ATOM	431	CG1	VAL	A	56	-20.617	-7.999	4.246	1.00	21.31	6	A	C
ATOM	432	CG2	VAL	A	56	-20.585	-5.599	3.472	1.00	23.05	6	A	C
ATOM	433	N	VAL	A	57	-23.685	-6.224	3.288	1.00	20.86	7	A	N
ATOM	434	CA	VAL	A	57	-24.469	-6.768	2.190	1.00	21.75	6	A	C
ATOM	435	C	VAL	A	57	-23.723	-6.526	0.883	1.00	20.68	6	A	C
ATOM	436	O	VAL	A	57	-23.491	-5.353	0.642	1.00	20.84	8	A	O
ATOM	437	CB	VAL	A	57	-25.824	-6.045	2.112	1.00	22.48	6	A	C
ATOM	438	CG1	VAL	A	57	-26.694	-6.557	0.980	1.00	22.69	6	A	C
ATOM	439	CG2	VAL	A	57	-26.560	-6.095	3.471	1.00	22.91	6	A	C
ATOM	440	N	PHE	A	58	-23.480	-7.537	0.086	1.00	20.00	7	A	N
ATOM	441	CA	PHE	A	58	-22.837	-7.366	-1.219	1.00	22.35	6	A	C
ATOM	442	C	PHE	A	58	-23.879	-7.064	-2.275	1.00	20.42	6	A	C
ATOM	443	O	PHE	A	58	-24.895	-7.720	-2.126	1.00	19.32	8	A	O
ATOM	444	CB	PHE	A	58	-22.100	-8.648	-1.664	1.00	21.29	6	A	C
ATOM	445	CG	PHE	A	58	-20.820	-8.841	-0.899	1.00	24.13	6	A	C
ATOM	446	CD1	PHE	A	58	-19.780	-7.931	-1.027	1.00	23.75	6	A	C
ATOM	447	CD2	PHE	A	58	-20.614	-9.993	-0.150	1.00	25.11	6	A	C
ATOM	448	CE1	PHE	A	58	-18.587	-8.105	-0.368	1.00	23.65	6	A	C
ATOM	449	CE2	PHE	A	58	-19.411	-10.155	0.549	1.00	24.94	6	A	C
ATOM	450	CZ	PHE	A	58	-18.405	-9.237	0.405	1.00	21.64	6	A	C
ATOM	451	N	THR	A	59	-23.740	-6.062	-3.148	1.00	20.16	7	A	N
ATOM	452	CA	THR	A	59	-24.805	-5.915	-4.165	1.00	20.34	6	A	C
ATOM	453	C	THR	A	59	-24.154	-6.041	-5.537	1.00	20.25	6	A	C
ATOM	454	O	THR	A	59	-24.853	-5.940	-6.531	1.00	20.65	8	A	O
ATOM	455	CB	THR	A	59	-25.691	-4.669	-4.061	1.00	19.78	6	A	C
ATOM	456	OG1	THR	A	59	-24.909	-3.478	-3.994	1.00	21.91	8	A	O
ATOM	457	CG2	THR	A	59	-26.583	-4.732	-2.801	1.00	18.86	6	A	C
ATOM	458	N	SER	A	60	-22.810	-6.184	-5.609	1.00	18.51	7	A	N
ATOM	459	CA	SER	A	60	-22.212	-6.353	-6.948	1.00	19.00	6	A	C
ATOM	460	C	SER	A	60	-20.793	-6.911	-6.842	1.00	20.20	6	A	C
ATOM	461	O	SER	A	60	-20.164	-6.683	-5.798	1.00	17.55	8	A	O
ATOM	462	CB	SER	A	60	-22.091	-5.013	-7.667	1.00	19.87	6	A	C
ATOM	463	OG	SER	A	60	-21.067	-4.147	-7.128	1.00	20.54	8	A	O
ATOM	464	N	GLY	A	61	-20.293	-7.506	-7.905	1.00	18.75	7	A	N

7/188

ATOM	465	CA	GLY	A	61	-18.905	-7.910	-8.004	1.00	16.94	6	A	C
ATOM	466	C	GLY	A	61	-18.555	-9.214	-7.371	1.00	18.36	6	A	C
ATOM	467	O	GLY	A	61	-17.407	-9.642	-7.433	1.00	18.67	8	A	O
ATOM	468	N	VAL	A	62	-19.520	-9.893	-6.734	1.00	18.96	7	A	N
ATOM	469	CA	VAL	A	62	-19.296	-11.128	-6.036	1.00	19.00	6	A	C
ATOM	470	C	VAL	A	62	-20.403	-12.106	-6.481	1.00	22.27	6	A	C
ATOM	471	O	VAL	A	62	-21.591	-11.791	-6.419	1.00	22.27	8	A	O
ATOM	472	CB	VAL	A	62	-19.287	-11.022	-4.513	1.00	21.45	6	A	C
ATOM	473	CG1	VAL	A	62	-18.932	-12.376	-3.876	1.00	20.88	6	A	C
ATOM	474	CG2	VAL	A	62	-18.323	-9.939	-4.021	1.00	21.87	6	A	C
ATOM	475	N	ARG	A	63	-19.961	-13.257	-6.992	1.00	20.46	7	A	N
ATOM	476	CA	ARG	A	63	-20.903	-14.217	-7.476	1.00	21.88	6	A	C
ATOM	477	C	ARG	A	63	-20.558	-15.641	-7.043	1.00	23.16	6	A	C
ATOM	478	O	ARG	A	63	-19.455	-16.112	-7.318	1.00	22.05	8	A	O
ATOM	479	CB	ARG	A	63	-20.956	-14.105	-9.012	1.00	23.78	6	A	C
ATOM	480	CG	ARG	A	63	-22.010	-15.048	-9.557	1.00	24.77	6	A	C
ATOM	481	CD	ARG	A	63	-22.141	-15.010	-11.082	1.00	24.97	6	A	C
ATOM	482	NE	ARG	A	63	-23.154	-16.002	-11.467	1.00	26.63	7	A	N
ATOM	483	CZ	ARG	A	63	-23.079	-16.708	-12.611	1.00	28.38	6	A	C
ATOM	484	NH1	ARG	A	63	-22.061	-16.558	-13.484	1.00	24.44	7	A	N
ATOM	485	NH2	ARG	A	63	-24.070	-17.555	-12.821	1.00	25.50	7	A	N
ATOM	486	N	HIS	A	64	-21.491	-16.331	-6.420	1.00	22.16	7	A	N
ATOM	487	CA	HIS	A	64	-21.221	-17.724	-6.027	1.00	23.65	6	A	C
ATOM	488	C	HIS	A	64	-19.943	-17.855	-5.230	1.00	23.40	6	A	C
ATOM	489	O	HIS	A	64	-19.202	-18.829	-5.418	1.00	23.29	8	A	O
ATOM	490	CB	HIS	A	64	-21.221	-18.678	-7.234	1.00	24.34	6	A	C
ATOM	491	CG	HIS	A	64	-22.553	-18.716	-7.935	1.00	26.40	6	A	C
ATOM	492	ND1	HIS	A	64	-22.762	-19.137	-9.229	1.00	27.49	7	A	N
ATOM	493	CD2	HIS	A	64	-23.783	-18.347	-7.449	1.00	24.28	6	A	C
ATOM	494	CE1	HIS	A	64	-24.044	-18.992	-9.516	1.00	26.22	6	A	C
ATOM	495	NE2	HIS	A	64	-24.677	-18.539	-8.431	1.00	25.31	7	A	N
ATOM	496	N	GLY	A	65	-19.638	-16.928	-4.338	1.00	21.66	7	A	N
ATOM	497	CA	GLY	A	65	-18.512	-16.997	-3.464	1.00	22.84	6	A	C
ATOM	498	C	GLY	A	65	-17.158	-16.439	-3.891	1.00	23.96	6	A	C
ATOM	499	O	GLY	A	65	-16.172	-16.478	-3.109	1.00	22.98	8	A	O
ATOM	500	N	LYS	A	66	-17.070	-15.912	-5.078	1.00	23.83	7	A	N
ATOM	501	CA	LYS	A	66	-15.842	-15.394	-5.652	1.00	24.42	6	A	C
ATOM	502	C	LYS	A	66	-16.037	-14.026	-6.299	1.00	24.71	6	A	C
ATOM	503	O	LYS	A	66	-17.101	-13.791	-6.908	1.00	22.47	8	A	O
ATOM	504	CB	LYS	A	66	-15.366	-16.361	-6.770	1.00	25.97	6	A	C
ATOM	505	CG	LYS	A	66	-14.731	-17.627	-6.168	1.00	32.21	6	A	C
ATOM	506	CD	LYS	A	66	-14.138	-18.502	-7.291	1.00	34.59	6	A	C
ATOM	507	CE	LYS	A	66	-13.615	-19.816	-6.686	1.00	36.58	6	A	C
ATOM	508	NZ	LYS	A	66	-12.929	-20.681	-7.717	1.00	36.64	7	A	N
ATOM	509	N	THR	A	67	-14.952	-13.237	-6.299	1.00	20.62	7	A	N
ATOM	510	CA	THR	A	67	-15.100	-11.950	-7.021	1.00	20.39	6	A	C
ATOM	511	C	THR	A	67	-15.034	-12.229	-8.531	1.00	19.26	6	A	C
ATOM	512	O	THR	A	67	-14.505	-13.263	-8.894	1.00	17.66	8	A	O
ATOM	513	CB	THR	A	67	-13.951	-11.035	-6.617	1.00	18.61	6	A	C
ATOM	514	OG1	THR	A	67	-12.769	-11.698	-7.061	1.00	18.11	8	A	O
ATOM	515	CG2	THR	A	67	-13.836	-10.862	-5.125	1.00	21.47	6	A	C
ATOM	516	N	THR	A	68	-15.605	-11.346	-9.351	1.00	20.62	7	A	N
ATOM	517	CA	THR	A	68	-15.595	-11.456	-10.790	1.00	22.30	6	A	C
ATOM	518	C	THR	A	68	-14.711	-10.429	-11.493	1.00	21.30	6	A	C
ATOM	519	O	THR	A	68	-14.495	-10.428	-12.705	1.00	21.47	8	A	O
ATOM	520	CB	THR	A	68	-17.030	-11.146	-11.299	1.00	21.79	6	A	C
ATOM	521	OG1	THR	A	68	-17.265	-9.757	-10.982	1.00	19.37	8	A	O
ATOM	522	CG2	THR	A	68	-18.028	-12.072	-10.628	1.00	16.92	6	A	C
ATOM	523	N	GLY	A	69	-14.074	-9.565	-10.699	1.00	20.18	7	A	N
ATOM	524	CA	GLY	A	69	-13.225	-8.508	-11.282	1.00	17.49	6	A	C
ATOM	525	C	GLY	A	69	-14.084	-7.257	-11.529	1.00	19.60	6	A	C
ATOM	526	O	GLY	A	69	-13.516	-6.183	-11.796	1.00	19.14	8	A	O
ATOM	527	N	ALA	A	70	-15.417	-7.340	-11.401	1.00	18.34	7	A	N
ATOM	528	CA	ALA	A	70	-16.181	-6.057	-11.616	1.00	19.59	6	A	C
ATOM	529	C	ALA	A	70	-16.111	-5.286	-10.298	1.00	19.31	6	A	C
ATOM	530	O	ALA	A	70	-15.617	-5.780	-9.284	1.00	18.40	8	A	O
ATOM	531	CB	ALA	A	70	-17.629	-6.413	-11.986	1.00	17.46	6	A	C
ATOM	532	N	PRO	A	71	-16.607	-4.052	-10.243	1.00	19.86	7	A	N
ATOM	533	CA	PRO	A	71	-16.668	-3.287	-9.027	1.00	19.91	6	A	C
ATOM	534	C	PRO	A	71	-17.442	-4.001	-7.917	1.00	19.99	6	A	C
ATOM	535	O	PRO	A	71	-18.535	-4.521	-8.123	1.00	18.34	8	A	O
ATOM	536	CB	PRO	A	71	-17.393	-1.970	-9.396	1.00	18.77	6	A	C
ATOM	537	CG	PRO	A	71	-17.162	-1.861	-10.876	1.00	19.44	6	A	C
ATOM	538	CD	PRO	A	71	-17.135	-3.282	-11.394	1.00	18.67	6	A	C
ATOM	539	N	ILE	A	72	-16.838	-3.939	-6.704	1.00	18.20	7	A	N
ATOM	540	CA	ILE	A	72	-17.555	-4.569	-5.581	1.00	18.47	6	A	C
ATOM	541	C	ILE	A	72	-18.298	-3.554	-4.746	1.00	18.07	6	A	C
ATOM	542	O	ILE	A	72	-17.631	-2.621	-4.298	1.00	19.64	8	A	O
ATOM	543	CB	ILE	A	72	-16.553	-5.330	-4.670	1.00	17.82	6	A	C

8/188

ATOM	544	CG1	ILE	A	72	-15.886	-6.427	-5.524	1.00	19.20	6	A	C
ATOM	545	CG2	ILE	A	72	-17.287	-5.907	-3.462	1.00	15.64	6	A	C
ATOM	546	CD1	ILE	A	72	-14.659	-7.057	-4.910	1.00	17.14	6	A	C
ATOM	547	N	THR	A	73	-19.575	-3.760	-4.452	1.00	17.27	7	A	N
ATOM	548	CA	THR	A	73	-20.316	-2.831	-3.605	1.00	18.64	6	A	C
ATOM	549	C	THR	A	73	-20.719	-3.518	-2.300	1.00	18.86	6	A	C
ATOM	550	O	THR	A	73	-21.213	-4.640	-2.368	1.00	17.61	8	A	O
ATOM	551	CB	THR	A	73	-21.628	-2.341	-4.281	1.00	17.67	6	A	C
ATOM	552	OG1	THR	A	73	-21.288	-1.855	-5.578	1.00	16.88	8	A	O
ATOM	553	CG2	THR	A	73	-22.308	-1.244	-3.479	1.00	16.77	6	A	C
ATOM	554	N	MET	A	74	-20.491	-2.828	-1.197	1.00	17.06	7	A	N
ATOM	555	CA	MET	A	74	-20.789	-3.298	0.143	1.00	19.64	6	A	C
ATOM	556	C	MET	A	74	-21.613	-2.232	0.853	1.00	20.21	6	A	C
ATOM	557	O	MET	A	74	-21.280	-1.026	0.761	1.00	18.94	8	A	O
ATOM	558	CB	MET	A	74	-19.457	-3.466	0.968	1.00	17.15	6	A	C
ATOM	559	CG	MET	A	74	-18.622	-4.479	0.163	1.00	17.92	6	A	C
ATOM	560	SE	MET	A	74	-17.070	-4.948	1.329	1.00	36.43	34	A	SE
ATOM	561	CE2	MET	A	74	-16.119	-3.209	1.107	1.00	25.46	6	A	C
ATOM	562	N	ASP	A	75	-22.649	-2.685	1.505	1.00	20.51	7	A	N
ATOM	563	CA	ASP	A	75	-23.510	-1.837	2.298	1.00	21.41	6	A	C
ATOM	564	C	ASP	A	75	-23.443	-2.227	3.786	1.00	20.96	6	A	C
ATOM	565	O	ASP	A	75	-23.348	-3.415	4.101	1.00	21.50	8	A	O
ATOM	566	CB	ASP	A	75	-25.009	-1.993	1.985	1.00	24.92	6	A	C
ATOM	567	CG	ASP	A	75	-25.495	-1.540	0.645	1.00	26.01	6	A	C
ATOM	568	OD1	ASP	A	75	-24.796	-1.013	-0.258	1.00	25.96	8	A	O
ATOM	569	OD2	ASP	A	75	-26.701	-1.800	0.404	1.00	27.83	8	A	O
ATOM	570	N	VAL	A	76	-23.527	-1.257	4.674	1.00	18.57	7	A	N
ATOM	571	CA	VAL	A	76	-23.679	-1.536	6.104	1.00	19.84	6	A	C
ATOM	572	C	VAL	A	76	-24.788	-0.591	6.589	1.00	21.46	6	A	C
ATOM	573	O	VAL	A	76	-24.570	0.629	6.514	1.00	21.20	8	A	O
ATOM	574	CB	VAL	A	76	-22.447	-1.331	6.993	1.00	19.31	6	A	C
ATOM	575	CG1	VAL	A	76	-22.761	-1.523	8.476	1.00	17.23	6	A	C
ATOM	576	CG2	VAL	A	76	-21.327	-2.301	6.593	1.00	20.79	6	A	C
ATOM	577	N	ILE	A	77	-25.915	-1.137	7.032	1.00	21.73	7	A	N
ATOM	578	CA	ILE	A	77	-27.013	-0.287	7.494	1.00	22.93	6	A	C
ATOM	579	C	ILE	A	77	-26.698	0.405	8.812	1.00	23.47	6	A	C
ATOM	580	O	ILE	A	77	-25.986	-0.090	9.683	1.00	23.74	8	A	O
ATOM	581	CB	ILE	A	77	-28.299	-1.142	7.629	1.00	25.25	6	A	C
ATOM	582	CG1	ILE	A	77	-28.787	-1.703	6.321	1.00	26.67	6	A	C
ATOM	583	CG2	ILE	A	77	-29.471	-0.397	8.300	1.00	26.09	6	A	C
ATOM	584	CD1	ILE	A	77	-29.383	-0.737	5.307	1.00	30.19	6	A	C
ATOM	585	N	ASN	A	78	-27.242	1.588	9.036	1.00	22.63	7	A	N
ATOM	586	CA	ASN	A	78	-27.158	2.271	10.312	1.00	24.35	6	A	C
ATOM	587	C	ASN	A	78	-28.493	2.023	11.059	1.00	25.41	6	A	C
ATOM	588	O	ASN	A	78	-29.496	2.590	10.680	1.00	23.34	8	A	O
ATOM	589	CB	ASN	A	78	-26.899	3.761	10.165	1.00	22.84	6	A	C
ATOM	590	CG	ASN	A	78	-25.551	4.176	9.633	1.00	23.28	6	A	C
ATOM	591	OD1	ASN	A	78	-24.515	3.598	9.945	1.00	23.35	8	A	O
ATOM	592	ND2	ASN	A	78	-25.469	5.211	8.773	1.00	21.68	7	A	N
ATOM	593	N	LYS	A	79	-28.486	1.159	12.043	1.00	28.77	7	A	N
ATOM	594	CA	LYS	A	79	-29.738	0.917	12.798	1.00	33.32	6	A	C
ATOM	595	C	LYS	A	79	-30.200	2.218	13.447	1.00	34.14	6	A	C
ATOM	596	O	LYS	A	79	-31.362	2.577	13.487	1.00	35.31	8	A	O
ATOM	597	CB	LYS	A	79	-29.433	-0.150	13.832	1.00	35.03	6	A	C
ATOM	598	CG	LYS	A	79	-29.052	-1.506	13.248	1.00	39.09	6	A	C
ATOM	599	CD	LYS	A	79	-29.469	-2.583	14.246	1.00	42.56	6	A	C
ATOM	600	CE	LYS	A	79	-29.572	-3.965	13.598	1.00	44.63	6	A	C
ATOM	601	NZ	LYS	A	79	-29.514	-4.957	14.727	1.00	44.85	7	A	N
ATOM	602	N	ASP	A	80	-29.270	3.045	13.898	1.00	34.55	7	A	N
ATOM	603	CA	ASP	A	80	-29.584	4.308	14.563	1.00	36.64	6	A	C
ATOM	604	C	ASP	A	80	-30.366	5.291	13.703	1.00	36.49	6	A	C
ATOM	605	O	ASP	A	80	-31.017	6.203	14.248	1.00	35.68	8	A	O
ATOM	606	CB	ASP	A	80	-28.248	4.867	15.079	1.00	38.90	6	A	C
ATOM	607	CG	ASP	A	80	-28.341	5.853	16.222	1.00	40.43	6	A	C
ATOM	608	OD1	ASP	A	80	-27.788	6.968	16.098	1.00	39.31	8	A	O
ATOM	609	OD2	ASP	A	80	-28.983	5.487	17.236	1.00	42.59	8	A	O
ATOM	610	N	HIS	A	81	-30.428	5.119	12.385	1.00	34.47	7	A	N
ATOM	611	CA	HIS	A	81	-31.089	6.069	11.495	1.00	34.98	6	A	C
ATOM	612	C	HIS	A	81	-32.563	6.361	11.779	1.00	36.81	6	A	C
ATOM	613	O	HIS	A	81	-33.145	7.398	11.430	1.00	32.79	8	A	O
ATOM	614	CB	HIS	A	81	-31.021	5.508	10.057	1.00	31.24	6	A	C
ATOM	615	CG	HIS	A	81	-31.645	6.446	9.079	1.00	29.28	6	A	C
ATOM	616	ND1	HIS	A	81	-31.202	7.752	8.971	1.00	27.92	7	A	N
ATOM	617	CD2	HIS	A	81	-32.694	6.300	8.234	1.00	27.90	6	A	C
ATOM	618	CE1	HIS	A	81	-31.907	8.346	8.020	1.00	29.05	6	A	C
ATOM	619	NE2	HIS	A	81	-32.836	7.504	7.605	1.00	29.38	7	A	N
ATOM	620	N	GLN	A	82	-33.171	5.357	12.393	1.00	40.65	7	A	N
ATOM	621	CA	GLN	A	82	-34.584	5.365	12.765	1.00	44.01	6	A	C
ATOM	622	C	GLN	A	82	-34.977	6.572	13.595	1.00	43.96	6	A	C

9/188

ATOM	623	O	GLN	A	82	-35.991	7.231	13.377	1.00	46.50	8	A	O
ATOM	624	CB	GLN	A	82	-34.863	4.052	13.526	1.00	45.34	6	A	C
ATOM	625	CG	GLN	A	82	-34.789	2.842	12.588	1.00	46.21	6	A	C
ATOM	626	CD	GLN	A	82	-35.634	3.068	11.340	1.00	47.49	6	A	C
ATOM	627	OE1	GLN	A	82	-35.131	3.224	10.225	1.00	46.98	8	A	O
ATOM	628	NE2	GLN	A	82	-36.940	3.108	11.590	1.00	48.75	7	A	N
ATOM	629	N	LYS	A	83	-34.083	6.984	14.470	1.00	44.31	7	A	N
ATOM	630	CA	LYS	A	83	-34.324	8.181	15.264	1.00	43.43	6	A	C
ATOM	631	C	LYS	A	83	-33.969	9.468	14.533	1.00	40.24	6	A	C
ATOM	632	O	LYS	A	83	-34.153	10.520	15.143	1.00	38.00	8	A	O
ATOM	633	CB	LYS	A	83	-33.594	8.038	16.581	1.00	46.64	6	A	C
ATOM	634	CG	LYS	A	83	-32.118	7.806	16.578	1.00	48.87	6	A	C
ATOM	635	CD	LYS	A	83	-31.607	7.184	17.864	1.00	51.39	6	A	C
ATOM	636	CE	LYS	A	83	-31.070	8.224	18.836	1.00	52.20	6	A	C
ATOM	637	NZ	LYS	A	83	-29.849	7.738	19.532	1.00	52.78	7	A	N
ATOM	638	N	TRP	A	84	-33.596	9.439	13.260	1.00	36.23	7	A	N
ATOM	639	CA	TRP	A	84	-33.160	10.633	12.558	1.00	34.40	6	A	C
ATOM	640	C	TRP	A	84	-33.790	10.822	11.181	1.00	34.94	6	A	C
ATOM	641	O	TRP	A	84	-33.326	11.611	10.345	1.00	33.58	8	A	O
ATOM	642	CB	TRP	A	84	-31.634	10.545	12.337	1.00	33.40	6	A	C
ATOM	643	CG	TRP	A	84	-30.781	10.486	13.558	1.00	31.64	6	A	C
ATOM	644	CD1	TRP	A	84	-30.400	9.355	14.218	1.00	31.93	6	A	C
ATOM	645	CD2	TRP	A	84	-30.151	11.576	14.256	1.00	31.80	6	A	C
ATOM	646	NE1	TRP	A	84	-29.597	9.662	15.293	1.00	32.74	7	A	N
ATOM	647	CE2	TRP	A	84	-29.419	11.026	15.326	1.00	32.38	6	A	C
ATOM	648	CE3	TRP	A	84	-30.073	12.949	14.038	1.00	30.87	6	A	C
ATOM	649	CZ2	TRP	A	84	-28.687	11.812	16.218	1.00	33.53	6	A	C
ATOM	650	CZ3	TRP	A	84	-29.346	13.735	14.918	1.00	31.64	6	A	C
ATOM	651	CH2	TRP	A	84	-28.648	13.169	16.003	1.00	32.26	6	A	C
ATOM	652	N	LEU	A	85	-34.878	10.134	10.882	1.00	35.76	7	A	N
ATOM	653	CA	LEU	A	85	-35.547	10.160	9.598	1.00	36.99	6	A	C
ATOM	654	C	LEU	A	85	-35.879	11.543	9.045	1.00	38.56	6	A	C
ATOM	655	O	LEU	A	85	-35.748	11.841	7.841	1.00	39.74	8	A	O
ATOM	656	CB	LEU	A	85	-36.851	9.339	9.702	1.00	38.78	6	A	C
ATOM	657	CG	LEU	A	85	-36.646	7.861	10.073	1.00	38.97	6	A	C
ATOM	658	CD1	LEU	A	85	-37.994	7.183	10.314	1.00	38.99	6	A	C
ATOM	659	CD2	LEU	A	85	-35.915	7.139	8.951	1.00	39.90	6	A	C
ATOM	660	N	ASP	A	86	-36.353	12.420	9.911	1.00	36.52	7	A	N
ATOM	661	CA	ASP	A	86	-36.700	13.769	9.488	1.00	36.59	6	A	C
ATOM	662	C	ASP	A	86	-35.434	14.576	9.234	1.00	32.46	6	A	C
ATOM	663	O	ASP	A	86	-35.230	15.238	8.201	1.00	28.95	8	A	O
ATOM	664	CB	ASP	A	86	-37.577	14.394	10.578	1.00	40.34	6	A	C
ATOM	665	CG	ASP	A	86	-37.126	14.277	12.015	1.00	44.06	6	A	C
ATOM	666	OD1	ASP	A	86	-36.153	13.558	12.383	1.00	44.30	8	A	O
ATOM	667	OD2	ASP	A	86	-37.766	14.964	12.871	1.00	45.29	8	A	O
ATOM	668	N	ILE	A	87	-34.610	14.544	10.285	1.00	27.27	7	A	N
ATOM	669	CA	ILE	A	87	-33.430	15.366	10.352	1.00	25.65	6	A	C
ATOM	670	C	ILE	A	87	-32.458	15.138	9.205	1.00	25.40	6	A	C
ATOM	671	O	ILE	A	87	-31.870	16.091	8.690	1.00	24.08	8	A	O
ATOM	672	CB	ILE	A	87	-32.718	15.129	11.698	1.00	24.80	6	A	C
ATOM	673	CG1	ILE	A	87	-33.618	15.622	12.874	1.00	24.80	6	A	C
ATOM	674	CG2	ILE	A	87	-31.393	15.844	11.719	1.00	23.75	6	A	C
ATOM	675	CD1	ILE	A	87	-33.039	15.221	14.241	1.00	27.61	6	A	C
ATOM	676	N	MET	A	88	-32.301	13.886	8.858	1.00	24.54	7	A	N
ATOM	677	CA	MET	A	88	-31.373	13.462	7.820	1.00	26.07	6	A	C
ATOM	678	C	MET	A	88	-32.038	13.072	6.495	1.00	25.51	6	A	C
ATOM	679	O	MET	A	88	-31.347	12.563	5.604	1.00	25.91	8	A	O
ATOM	680	CB	MET	A	88	-30.628	12.225	8.341	1.00	23.66	6	A	C
ATOM	681	CG	MET	A	88	-29.841	12.442	9.608	1.00	21.80	6	A	C
ATOM	682	SE	MET	A	88	-28.397	13.871	9.026	1.00	41.82	34	A	SE
ATOM	683	CE2	MET	A	88	-27.068	12.787	7.804	1.00	18.95	6	A	C
ATOM	684	N	SER	A	89	-33.312	13.336	6.308	1.00	24.68	7	A	N
ATOM	685	CA	SER	A	89	-33.925	12.974	5.004	1.00	26.56	6	A	C
ATOM	686	C	SER	A	89	-33.269	13.665	3.818	1.00	25.57	6	A	C
ATOM	687	O	SER	A	89	-32.991	14.876	3.800	1.00	21.71	8	A	O
ATOM	688	CB	SER	A	89	-35.377	13.396	5.210	1.00	29.06	6	A	C
ATOM	689	OG	SER	A	89	-35.906	13.966	4.064	1.00	33.18	8	A	O
ATOM	690	N	ALA	A	90	-33.091	12.970	2.687	1.00	27.38	7	A	N
ATOM	691	CA	ALA	A	90	-32.569	13.589	1.468	1.00	26.95	6	A	C
ATOM	692	C	ALA	A	90	-33.482	14.666	0.865	1.00	28.28	6	A	C
ATOM	693	O	ALA	A	90	-33.087	15.670	0.254	1.00	22.54	8	A	O
ATOM	694	CB	ALA	A	90	-32.414	12.525	0.391	1.00	28.71	6	A	C
ATOM	695	N	GLU	A	91	-34.805	14.448	1.018	1.00	29.10	7	A	N
ATOM	696	CA	GLU	A	91	-35.734	15.384	0.384	1.00	30.72	6	A	C
ATOM	697	C	GLU	A	91	-35.987	16.597	1.242	1.00	28.79	6	A	C
ATOM	698	O	GLU	A	91	-35.757	16.605	2.464	1.00	24.67	8	A	O
ATOM	699	CB	GLU	A	91	-37.055	14.724	-0.052	1.00	36.86	6	A	C
ATOM	700	CG	GLU	A	91	-37.634	13.756	0.953	1.00	42.16	6	A	C
ATOM	701	CD	GLU	A	91	-36.842	12.452	0.921	1.00	45.64	6	A	C

10/188

ATOM	702	OE1	GLU	A	91	-36.045	12.223	1.862	1.00	48.99	8	A	O
ATOM	703	OE2	GLU	A	91	-36.888	11.684	-0.051	1.00	48.31	8	A	O
ATOM	704	N	ASP	A	92	-36.486	17.653	0.596	1.00	28.86	7	A	N
ATOM	705	CA	ASP	A	92	-36.722	18.889	1.378	1.00	33.84	6	A	C
ATOM	706	C	ASP	A	92	-37.923	18.696	2.305	1.00	35.37	6	A	C
ATOM	707	O	ASP	A	92	-38.750	17.813	2.077	1.00	34.19	8	A	O
ATOM	708	CB	ASP	A	92	-36.921	20.055	0.411	1.00	35.70	6	A	C
ATOM	709	CG	ASP	A	92	-36.684	21.388	1.084	1.00	38.42	6	A	C
ATOM	710	OD1	ASP	A	92	-36.151	21.512	2.210	1.00	39.01	8	A	O
ATOM	711	OD2	ASP	A	92	-37.031	22.393	0.439	1.00	41.08	8	A	O
ATOM	712	N	ILE	A	93	-38.032	19.461	3.361	1.00	38.44	7	A	N
ATOM	713	CA	ILE	A	93	-39.124	19.408	4.321	1.00	41.13	6	A	C
ATOM	714	C	ILE	A	93	-39.503	20.836	4.715	1.00	43.72	6	A	C
ATOM	715	O	ILE	A	93	-38.802	21.786	4.350	1.00	43.12	8	A	O
ATOM	716	CB	ILE	A	93	-38.748	18.599	5.581	1.00	39.77	6	A	C
ATOM	717	CG1	ILE	A	93	-37.623	19.265	6.367	1.00	39.95	6	A	C
ATOM	718	CG2	ILE	A	93	-38.351	17.191	5.171	1.00	39.05	6	A	C
ATOM	719	CD1	ILE	A	93	-37.237	18.536	7.646	1.00	38.37	6	A	C
ATOM	720	N	GLU	A	94	-40.582	21.003	5.475	1.00	46.87	7	A	N
ATOM	721	CA	GLU	A	94	-41.005	22.336	5.897	1.00	49.06	6	A	C
ATOM	722	C	GLU	A	94	-39.861	23.110	6.533	1.00	48.07	6	A	C
ATOM	723	O	GLU	A	94	-39.203	22.541	7.401	1.00	46.27	8	A	O
ATOM	724	CB	GLU	A	94	-42.119	22.292	6.958	1.00	52.40	6	A	C
ATOM	725	CG	GLU	A	94	-43.205	21.303	6.545	1.00	55.92	6	A	C
ATOM	726	CD	GLU	A	94	-44.079	21.867	5.443	1.00	57.75	6	A	C
ATOM	727	OE1	GLU	A	94	-43.591	22.441	4.446	1.00	58.69	8	A	O
ATOM	728	OE2	GLU	A	94	-45.319	21.732	5.581	1.00	59.42	8	A	O
ATOM	729	N	ASP	A	95	-39.760	24.364	6.133	1.00	47.45	7	A	N
ATOM	730	CA	ASP	A	95	-38.731	25.240	6.660	1.00	48.91	6	A	C
ATOM	731	C	ASP	A	95	-38.696	25.223	8.189	1.00	46.35	6	A	C
ATOM	732	O	ASP	A	95	-37.600	25.245	8.721	1.00	45.05	8	A	O
ATOM	733	CB	ASP	A	95	-38.982	26.691	6.243	1.00	52.58	6	A	C
ATOM	734	CG	ASP	A	95	-37.710	27.505	6.129	1.00	56.22	6	A	C
ATOM	735	OD1	ASP	A	95	-36.905	27.140	5.232	1.00	57.97	8	A	O
ATOM	736	OD2	ASP	A	95	-37.529	28.478	6.903	1.00	57.31	8	A	O
ATOM	737	N	ARG	A	96	-39.869	25.187	8.807	1.00	43.34	7	A	N
ATOM	738	CA	ARG	A	96	-39.927	25.248	10.264	1.00	42.65	6	A	C
ATOM	739	C	ARG	A	96	-39.292	24.044	10.941	1.00	39.94	6	A	C
ATOM	740	O	ARG	A	96	-39.027	24.118	12.132	1.00	40.42	8	A	O
ATOM	741	CB	ARG	A	96	-41.371	25.442	10.749	1.00	41.81	6	A	C
ATOM	742	CG	ARG	A	96	-42.285	24.251	10.618	1.00	43.53	6	A	C
ATOM	743	CD	ARG	A	96	-43.762	24.593	10.913	1.00	43.67	6	A	C
ATOM	744	NE	ARG	A	96	-44.545	23.405	10.555	1.00	43.68	7	A	N
ATOM	745	CZ	ARG	A	96	-44.833	22.408	11.388	1.00	43.96	6	A	C
ATOM	746	NH1	ARG	A	96	-44.458	22.481	12.656	1.00	43.58	7	A	N
ATOM	747	NH2	ARG	A	96	-45.495	21.362	10.929	1.00	44.03	7	A	N
ATOM	748	N	LEU	A	97	-39.027	22.980	10.204	1.00	38.06	7	A	N
ATOM	749	CA	LEU	A	97	-38.543	21.752	10.831	1.00	38.33	6	A	C
ATOM	750	C	LEU	A	97	-37.044	21.550	10.688	1.00	38.37	6	A	C
ATOM	751	O	LEU	A	97	-36.464	20.628	11.252	1.00	38.38	8	A	O
ATOM	752	CB	LEU	A	97	-39.248	20.587	10.108	1.00	37.08	6	A	C
ATOM	753	CG	LEU	A	97	-40.786	20.616	10.222	1.00	37.35	6	A	C
ATOM	754	CD1	LEU	A	97	-41.430	19.627	9.268	1.00	36.33	6	A	C
ATOM	755	CD2	LEU	A	97	-41.252	20.343	11.643	1.00	36.40	6	A	C
ATOM	756	N	LYS	A	98	-36.459	22.381	9.845	1.00	35.51	7	A	N
ATOM	757	CA	LYS	A	98	-35.069	22.218	9.467	1.00	36.83	6	A	C
ATOM	758	C	LYS	A	98	-34.092	22.612	10.564	1.00	36.46	6	A	C
ATOM	759	O	LYS	A	98	-32.959	22.157	10.493	1.00	37.11	8	A	O
ATOM	760	CB	LYS	A	98	-34.779	22.988	8.172	1.00	33.94	6	A	C
ATOM	761	CG	LYS	A	98	-35.384	22.349	6.918	1.00	33.67	6	A	C
ATOM	762	CD	LYS	A	98	-34.940	23.191	5.725	1.00	36.21	6	A	C
ATOM	763	CE	LYS	A	98	-35.930	23.181	4.596	1.00	37.56	6	A	C
ATOM	764	NZ	LYS	A	98	-35.382	23.794	3.361	1.00	37.79	7	A	N
ATOM	765	N	SER	A	99	-34.594	23.287	11.589	1.00	36.17	7	A	N
ATOM	766	CA	SER	A	99	-33.735	23.685	12.701	1.00	36.37	6	A	C
ATOM	767	C	SER	A	99	-33.556	22.616	13.753	1.00	33.14	6	A	C
ATOM	768	O	SER	A	99	-32.774	22.755	14.691	1.00	33.29	8	A	O
ATOM	769	CB	SER	A	99	-34.270	24.993	13.314	1.00	37.71	6	A	C
ATOM	770	OG	SER	A	99	-33.685	25.992	12.453	1.00	43.15	8	A	O
ATOM	771	N	LYS	A	100	-34.210	21.492	13.559	1.00	32.27	7	A	N
ATOM	772	CA	LYS	A	100	-34.146	20.389	14.502	1.00	32.48	6	A	C
ATOM	773	C	LYS	A	100	-32.725	19.852	14.627	1.00	31.35	6	A	C
ATOM	774	O	LYS	A	100	-32.087	19.441	13.663	1.00	29.16	8	A	O
ATOM	775	CB	LYS	A	100	-35.113	19.317	13.981	1.00	35.10	6	A	C
ATOM	776	CG	LYS	A	100	-35.156	18.064	14.840	1.00	39.39	6	A	C
ATOM	777	CD	LYS	A	100	-36.399	17.213	14.541	1.00	41.37	6	A	C
ATOM	778	CE	LYS	A	100	-36.646	16.240	15.697	1.00	42.68	6	A	C
ATOM	779	NZ	LYS	A	100	-37.731	15.260	15.424	1.00	44.07	7	A	N
ATOM	780	N	ARG	A	101	-32.186	19.847	15.842	1.00	30.70	7	A	N

11/188

ATOM	781	CA	ARG	A	101	-30.895	19.325	16.177	1.00	31.20	6	A	C
ATOM	782	C	ARG	A	101	-29.789	20.041	15.386	1.00	31.49	6	A	C
ATOM	783	O	ARG	A	101	-28.693	19.495	15.274	1.00	29.69	8	A	O
ATOM	784	CB	ARG	A	101	-30.780	17.810	16.014	1.00	34.07	6	A	C
ATOM	785	CG	ARG	A	101	-31.647	16.957	16.924	1.00	36.88	6	A	C
ATOM	786	CD	ARG	A	101	-31.893	17.450	18.324	1.00	39.56	6	A	C
ATOM	787	NE	ARG	A	101	-30.764	17.680	19.207	1.00	42.32	7	A	N
ATOM	788	CZ	ARG	A	101	-30.640	18.766	19.972	1.00	43.68	6	A	C
ATOM	789	NH1	ARG	A	101	-31.544	19.759	19.989	1.00	43.75	7	A	N
ATOM	790	NH2	ARG	A	101	-29.584	18.935	20.761	1.00	45.84	7	A	N
ATOM	791	N	LYS	A	102	-30.107	21.264	14.958	1.00	32.13	7	A	N
ATOM	792	CA	LYS	A	102	-29.108	22.075	14.262	1.00	33.57	6	A	C
ATOM	793	C	LYS	A	102	-27.911	22.320	15.194	1.00	33.04	6	A	C
ATOM	794	O	LYS	A	102	-28.086	22.564	16.405	1.00	30.44	8	A	O
ATOM	795	CB	LYS	A	102	-29.643	23.452	13.892	1.00	34.21	6	A	C
ATOM	796	CG	LYS	A	102	-28.639	24.358	13.172	1.00	33.93	6	A	C
ATOM	797	CD	LYS	A	102	-29.238	25.745	13.112	1.00	37.28	6	A	C
ATOM	798	CE	LYS	A	102	-28.513	26.660	12.133	1.00	39.19	6	A	C
ATOM	799	NZ	LYS	A	102	-28.938	28.068	12.409	1.00	41.53	7	A	N
ATOM	800	N	ILE	A	103	-26.704	22.253	14.630	1.00	30.06	7	A	N
ATOM	801	CA	ILE	A	103	-25.545	22.469	15.495	1.00	27.59	6	A	C
ATOM	802	C	ILE	A	103	-24.888	23.816	15.244	1.00	26.41	6	A	C
ATOM	803	O	ILE	A	103	-24.483	24.105	14.106	1.00	25.71	8	A	O
ATOM	804	CB	ILE	A	103	-24.484	21.380	15.365	1.00	28.34	6	A	C
ATOM	805	CG1	ILE	A	103	-25.155	20.012	15.479	1.00	28.42	6	A	C
ATOM	806	CG2	ILE	A	103	-23.448	21.598	16.477	1.00	28.83	6	A	C
ATOM	807	CD1	ILE	A	103	-24.143	18.895	15.485	1.00	28.41	6	A	C
ATOM	808	N	THR	A	104	-24.686	24.538	16.333	1.00	25.48	7	A	N
ATOM	809	CA	THR	A	104	-24.009	25.840	16.217	1.00	25.35	6	A	C
ATOM	810	C	THR	A	104	-22.923	25.995	17.281	1.00	25.03	6	A	C
ATOM	811	O	THR	A	104	-22.316	27.063	17.421	1.00	24.15	8	A	O
ATOM	812	CB	THR	A	104	-25.022	26.977	16.264	1.00	25.08	6	A	C
ATOM	813	OG1	THR	A	104	-25.606	27.000	17.555	1.00	25.50	8	A	O
ATOM	814	CG2	THR	A	104	-26.128	26.796	15.223	1.00	25.65	6	A	C
ATOM	815	N	HIS	A	105	-22.556	24.924	17.953	1.00	25.12	7	A	N
ATOM	816	CA	HIS	A	105	-21.492	24.879	18.952	1.00	27.84	6	A	C
ATOM	817	C	HIS	A	105	-20.406	23.905	18.520	1.00	25.94	6	A	C
ATOM	818	O	HIS	A	105	-20.525	22.701	18.717	1.00	26.90	8	A	O
ATOM	819	CB	HIS	A	105	-22.081	24.417	20.300	1.00	31.43	6	A	C
ATOM	820	CG	HIS	A	105	-23.046	25.445	20.819	1.00	35.83	6	A	C
ATOM	821	ND1	HIS	A	105	-24.395	25.360	20.529	1.00	36.96	7	A	N
ATOM	822	CD2	HIS	A	105	-22.885	26.572	21.541	1.00	37.04	6	A	C
ATOM	823	CE1	HIS	A	105	-25.029	26.378	21.082	1.00	39.03	6	A	C
ATOM	824	NE2	HIS	A	105	-24.132	27.128	21.698	1.00	38.15	7	A	N
ATOM	825	N	PRO	A	106	-19.361	24.378	17.869	1.00	24.31	7	A	N
ATOM	826	CA	PRO	A	106	-18.315	23.474	17.379	1.00	22.00	6	A	C
ATOM	827	C	PRO	A	106	-17.595	22.807	18.515	1.00	21.20	6	A	C
ATOM	828	O	PRO	A	106	-17.160	23.464	19.475	1.00	19.37	8	A	O
ATOM	829	CB	PRO	A	106	-17.445	24.394	16.530	1.00	19.65	6	A	C
ATOM	830	CG	PRO	A	106	-17.599	25.744	17.189	1.00	22.49	6	A	C
ATOM	831	CD	PRO	A	106	-19.092	25.798	17.542	1.00	22.09	6	A	C
ATOM	832	N	ARG	A	107	-17.226	21.544	18.323	1.00	21.18	7	A	N
ATOM	833	CA	ARG	A	107	-16.400	20.895	19.342	1.00	22.88	6	A	C
ATOM	834	C	ARG	A	107	-14.918	21.091	19.080	1.00	24.07	6	A	C
ATOM	835	O	ARG	A	107	-14.412	20.727	18.009	1.00	22.66	8	A	O
ATOM	836	CB	ARG	A	107	-16.697	19.390	19.353	1.00	23.77	6	A	C
ATOM	837	CG	ARG	A	107	-18.145	19.035	19.726	1.00	23.50	6	A	C
ATOM	838	CD	ARG	A	107	-18.439	17.611	19.226	1.00	24.91	6	A	C
ATOM	839	NE	ARG	A	107	-18.347	17.511	17.778	1.00	23.93	7	A	N
ATOM	840	CZ	ARG	A	107	-18.481	16.380	17.072	1.00	24.58	6	A	C
ATOM	841	NH1	ARG	A	107	-18.681	15.268	17.756	1.00	20.63	7	A	N
ATOM	842	NH2	ARG	A	107	-18.352	16.308	15.758	1.00	20.55	7	A	N
ATOM	843	N	PRO	A	108	-14.173	21.572	20.065	1.00	22.65	7	A	N
ATOM	844	CA	PRO	A	108	-12.739	21.714	19.924	1.00	23.60	6	A	C
ATOM	845	C	PRO	A	108	-12.161	20.340	19.605	1.00	22.98	6	A	C
ATOM	846	O	PRO	A	108	-12.681	19.325	20.075	1.00	21.89	8	A	O
ATOM	847	CB	PRO	A	108	-12.254	22.218	21.266	1.00	22.74	6	A	C
ATOM	848	CG	PRO	A	108	-13.443	22.818	21.921	1.00	21.80	6	A	C
ATOM	849	CD	PRO	A	108	-14.649	22.101	21.360	1.00	22.79	6	A	C
ATOM	850	N	GLY	A	109	-11.146	20.287	18.737	1.00	21.44	7	A	N
ATOM	851	CA	GLY	A	109	-10.557	19.029	18.377	1.00	19.45	6	A	C
ATOM	852	C	GLY	A	109	-11.308	18.326	17.259	1.00	20.43	6	A	C
ATOM	853	O	GLY	A	109	-10.800	17.338	16.699	1.00	20.37	8	A	O
ATOM	854	N	HIS	A	110	-12.503	18.757	16.918	1.00	19.64	7	A	N
ATOM	855	CA	HIS	A	110	-13.229	18.164	15.794	1.00	20.47	6	A	C
ATOM	856	C	HIS	A	110	-13.180	18.987	14.521	1.00	20.18	6	A	C
ATOM	857	O	HIS	A	110	-12.708	20.138	14.499	1.00	16.71	8	A	O
ATOM	858	CB	HIS	A	110	-14.692	18.004	16.242	1.00	22.24	6	A	C
ATOM	859	CG	HIS	A	110	-14.941	16.641	16.804	1.00	25.48	6	A	C

12/188

ATOM	860	ND1	HIS	A	110	-15.340	15.571	16.034	1.00	26.37	7	A	N
ATOM	861	CD2	HIS	A	110	-14.826	16.178	18.067	1.00	28.64	6	A	C
ATOM	862	CE1	HIS	A	110	-15.492	14.516	16.791	1.00	26.06	6	A	C
ATOM	863	NE2	HIS	A	110	-15.136	14.820	18.027	1.00	28.74	7	A	N
ATOM	864	N	ALA	A	111	-13.796	18.450	13.463	1.00	19.85	7	A	N
ATOM	865	CA	ALA	A	111	-13.889	19.069	12.168	1.00	21.51	6	A	C
ATOM	866	C	ALA	A	111	-14.966	20.145	12.079	1.00	22.44	6	A	C
ATOM	867	O	ALA	A	111	-15.052	20.861	11.057	1.00	24.07	8	A	O
ATOM	868	CB	ALA	A	111	-14.237	18.062	11.039	1.00	18.78	6	A	C
ATOM	869	N	ASP	A	112	-15.820	20.231	13.090	1.00	22.06	7	A	N
ATOM	870	CA	ASP	A	112	-16.983	21.075	13.014	1.00	19.90	6	A	C
ATOM	871	C	ASP	A	112	-16.788	22.464	12.427	1.00	18.66	6	A	C
ATOM	872	O	ASP	A	112	-17.471	22.824	11.463	1.00	16.84	8	A	O
ATOM	873	CB	ASP	A	112	-17.687	21.209	14.381	1.00	22.44	6	A	C
ATOM	874	CG	ASP	A	112	-17.959	19.903	15.080	1.00	23.34	6	A	C
ATOM	875	OD1	ASP	A	112	-17.806	18.831	14.436	1.00	22.91	8	A	O
ATOM	876	OD2	ASP	A	112	-18.243	19.895	16.290	1.00	21.12	8	A	O
ATOM	877	N	LEU	A	113	-16.054	23.325	13.093	1.00	18.25	7	A	N
ATOM	878	CA	LEU	A	113	-15.968	24.749	12.758	1.00	20.05	6	A	C
ATOM	879	C	LEU	A	113	-15.317	24.969	11.395	1.00	19.66	6	A	C
ATOM	880	O	LEU	A	113	-15.792	25.675	10.517	1.00	18.12	8	A	O
ATOM	881	CB	LEU	A	113	-15.137	25.493	13.831	1.00	19.59	6	A	C
ATOM	882	CG	LEU	A	113	-14.832	26.979	13.532	1.00	20.62	6	A	C
ATOM	883	CD1	LEU	A	113	-16.118	27.794	13.293	1.00	20.51	6	A	C
ATOM	884	CD2	LEU	A	113	-14.075	27.612	14.711	1.00	18.26	6	A	C
ATOM	885	N	VAL	A	114	-14.178	24.315	11.229	1.00	19.90	7	A	N
ATOM	886	CA	VAL	A	114	-13.433	24.463	9.972	1.00	19.32	6	A	C
ATOM	887	C	VAL	A	114	-14.242	23.933	8.811	1.00	19.20	6	A	C
ATOM	888	O	VAL	A	114	-14.206	24.567	7.766	1.00	18.08	8	A	O
ATOM	889	CB	VAL	A	114	-12.072	23.763	10.095	1.00	18.35	6	A	C
ATOM	890	CG1	VAL	A	114	-11.399	23.722	8.732	1.00	19.01	6	A	C
ATOM	891	CG2	VAL	A	114	-11.214	24.545	11.086	1.00	18.12	6	A	C
ATOM	892	N	GLY	A	115	-14.951	22.827	9.050	1.00	17.78	7	A	N
ATOM	893	CA	GLY	A	115	-15.812	22.314	7.957	1.00	18.24	6	A	C
ATOM	894	C	GLY	A	115	-16.870	23.370	7.629	1.00	19.86	6	A	C
ATOM	895	O	GLY	A	115	-17.266	23.583	6.499	1.00	15.20	8	A	O
ATOM	896	N	GLY	A	116	-17.510	23.953	8.630	1.00	20.50	7	A	N
ATOM	897	CA	GLY	A	116	-18.548	24.958	8.350	1.00	18.48	6	A	C
ATOM	898	C	GLY	A	116	-17.975	26.225	7.705	1.00	18.79	6	A	C
ATOM	899	O	GLY	A	116	-18.593	26.776	6.750	1.00	18.95	8	A	O
ATOM	900	N	ILE	A	117	-16.696	26.486	7.918	1.00	17.71	7	A	N
ATOM	901	CA	ILE	A	117	-16.113	27.642	7.182	1.00	18.09	6	A	C
ATOM	902	C	ILE	A	117	-15.885	27.240	5.721	1.00	18.30	6	A	C
ATOM	903	O	ILE	A	117	-16.274	27.913	4.755	1.00	16.91	8	A	O
ATOM	904	CB	ILE	A	117	-14.834	28.170	7.845	1.00	18.44	6	A	C
ATOM	905	CG1	ILE	A	117	-15.210	28.748	9.215	1.00	18.68	6	A	C
ATOM	906	CG2	ILE	A	117	-14.194	29.237	6.950	1.00	18.72	6	A	C
ATOM	907	CD1	ILE	A	117	-14.031	29.030	10.118	1.00	16.90	6	A	C
ATOM	908	N	LYS	A	118	-15.202	26.136	5.514	1.00	15.38	7	A	N
ATOM	909	CA	LYS	A	118	-14.903	25.600	4.219	1.00	16.20	6	A	C
ATOM	910	C	LYS	A	118	-16.173	25.465	3.369	1.00	17.53	6	A	C
ATOM	911	O	LYS	A	118	-16.144	25.856	2.199	1.00	16.53	8	A	O
ATOM	912	CB	LYS	A	118	-14.247	24.215	4.309	1.00	16.25	6	A	C
ATOM	913	CG	LYS	A	118	-13.723	23.623	2.989	1.00	15.17	6	A	C
ATOM	914	CD	LYS	A	118	-13.113	22.236	3.183	1.00	17.87	6	A	C
ATOM	915	CE	LYS	A	118	-12.668	21.513	1.936	1.00	19.65	6	A	C
ATOM	916	NZ	LYS	A	118	-11.455	22.144	1.324	1.00	16.46	7	A	N
ATOM	917	N	TYR	A	119	-17.181	24.770	3.886	1.00	17.40	7	A	N
ATOM	918	CA	TYR	A	119	-18.352	24.460	3.070	1.00	19.14	6	A	C
ATOM	919	C	TYR	A	119	-19.487	25.457	3.271	1.00	19.16	6	A	C
ATOM	920	O	TYR	A	119	-20.482	25.357	2.569	1.00	19.60	8	A	O
ATOM	921	CB	TYR	A	119	-18.805	23.014	3.340	1.00	19.73	6	A	C
ATOM	922	CG	TYR	A	119	-17.794	21.976	2.881	1.00	19.90	6	A	C
ATOM	923	CD1	TYR	A	119	-17.122	21.164	3.781	1.00	18.32	6	A	C
ATOM	924	CD2	TYR	A	119	-17.560	21.775	1.539	1.00	18.75	6	A	C
ATOM	925	CE1	TYR	A	119	-16.231	20.218	3.341	1.00	17.81	6	A	C
ATOM	926	CE2	TYR	A	119	-16.665	20.819	1.088	1.00	19.80	6	A	C
ATOM	927	CZ	TYR	A	119	-16.007	20.037	2.003	1.00	19.60	6	A	C
ATOM	928	OH	TYR	A	119	-15.120	19.050	1.595	1.00	19.42	8	A	O
ATOM	929	N	ARG	A	120	-19.237	26.530	4.010	1.00	17.49	7	A	N
ATOM	930	CA	ARG	A	120	-20.189	27.589	4.259	1.00	19.95	6	A	C
ATOM	931	C	ARG	A	120	-21.520	27.043	4.779	1.00	19.37	6	A	C
ATOM	932	O	ARG	A	120	-22.617	27.362	4.298	1.00	20.61	8	A	O
ATOM	933	CB	ARG	A	120	-20.383	28.485	3.019	1.00	18.20	6	A	C
ATOM	934	CG	ARG	A	120	-18.994	28.899	2.487	1.00	18.93	6	A	C
ATOM	935	CD	ARG	A	120	-19.152	30.173	1.628	1.00	19.08	6	A	C
ATOM	936	NE	ARG	A	120	-17.837	30.733	1.250	1.00	21.14	7	A	N
ATOM	937	CZ	ARG	A	120	-17.714	31.754	0.388	1.00	22.77	6	A	C
ATOM	938	NH1	ARG	A	120	-18.789	32.329	-0.131	1.00	23.14	7	A	N

13/188

ATOM	939	NH2	ARG	A	120	-16.510	32.219	0.078	1.00	22.04	7	A	N
ATOM	940	N	PHE	A	121	-21.408	26.272	5.846	1.00	18.96	7	A	N
ATOM	941	CA	PHE	A	121	-22.655	25.737	6.431	1.00	21.40	6	A	C
ATOM	942	C	PHE	A	121	-23.177	26.693	7.485	1.00	20.78	6	A	C
ATOM	943	O	PHE	A	121	-22.362	27.314	8.160	1.00	20.56	8	A	O
ATOM	944	CB	PHE	A	121	-22.369	24.412	7.151	1.00	20.65	6	A	C
ATOM	945	CG	PHE	A	121	-21.924	23.229	6.332	1.00	21.95	6	A	C
ATOM	946	CD1	PHE	A	121	-20.875	22.432	6.765	1.00	22.76	6	A	C
ATOM	947	CD2	PHE	A	121	-22.481	22.932	5.097	1.00	22.88	6	A	C
ATOM	948	CE1	PHE	A	121	-20.472	21.316	6.029	1.00	22.44	6	A	C
ATOM	949	CE2	PHE	A	121	-22.071	21.860	4.332	1.00	20.40	6	A	C
ATOM	950	CZ	PHE	A	121	-21.056	21.049	4.810	1.00	20.98	6	A	C
ATOM	951	N	ASP	A	122	-24.469	26.740	7.741	1.00	22.37	7	A	N
ATOM	952	CA	ASP	A	122	-25.047	27.403	8.891	1.00	23.83	6	A	C
ATOM	953	C	ASP	A	122	-25.268	26.373	10.004	1.00	22.65	6	A	C
ATOM	954	O	ASP	A	122	-25.245	26.612	11.221	1.00	25.77	8	A	O
ATOM	955	CB	ASP	A	122	-26.421	27.997	8.546	1.00	28.01	6	A	C
ATOM	956	CG	ASP	A	122	-26.177	29.121	7.530	1.00	30.99	6	A	C
ATOM	957	OD1	ASP	A	122	-26.927	29.251	6.564	1.00	32.22	8	A	O
ATOM	958	OD2	ASP	A	122	-25.121	29.757	7.715	1.00	31.81	8	A	O
ATOM	959	N	ASP	A	123	-25.409	25.128	9.611	1.00	20.41	7	A	N
ATOM	960	CA	ASP	A	123	-25.624	23.980	10.488	1.00	20.42	6	A	C
ATOM	961	C	ASP	A	123	-24.434	23.011	10.418	1.00	21.18	6	A	C
ATOM	962	O	ASP	A	123	-24.203	22.319	9.407	1.00	19.66	8	A	O
ATOM	963	CB	ASP	A	123	-26.872	23.204	10.051	1.00	18.57	6	A	C
ATOM	964	CG	ASP	A	123	-27.210	22.061	11.003	1.00	19.15	6	A	C
ATOM	965	OD1	ASP	A	123	-28.210	21.348	10.735	1.00	21.86	8	A	O
ATOM	966	OD2	ASP	A	123	-26.497	21.799	11.991	1.00	17.48	8	A	O
ATOM	967	N	LEU	A	124	-23.691	23.010	11.523	1.00	20.18	7	A	N
ATOM	968	CA	LEU	A	124	-22.464	22.245	11.599	1.00	20.46	6	A	C
ATOM	969	C	LEU	A	124	-22.765	20.748	11.636	1.00	21.15	6	A	C
ATOM	970	O	LEU	A	124	-21.813	19.971	11.523	1.00	17.56	8	A	O
ATOM	971	CB	LEU	A	124	-21.601	22.718	12.754	1.00	20.63	6	A	C
ATOM	972	CG	LEU	A	124	-21.130	24.191	12.725	1.00	21.69	6	A	C
ATOM	973	CD1	LEU	A	124	-20.079	24.410	13.782	1.00	22.03	6	A	C
ATOM	974	CD2	LEU	A	124	-20.637	24.665	11.367	1.00	23.81	6	A	C
ATOM	975	N	ARG	A	125	-24.054	20.351	11.688	1.00	22.15	7	A	N
ATOM	976	CA	ARG	A	125	-24.316	18.911	11.589	1.00	22.18	6	A	C
ATOM	977	C	ARG	A	125	-23.818	18.405	10.217	1.00	23.49	6	A	C
ATOM	978	O	ARG	A	125	-23.392	17.238	10.157	1.00	22.83	8	A	O
ATOM	979	CB	ARG	A	125	-25.789	18.507	11.691	1.00	23.78	6	A	C
ATOM	980	CG	ARG	A	125	-26.069	17.013	11.490	1.00	20.06	6	A	C
ATOM	981	CD	ARG	A	125	-27.516	16.703	11.857	1.00	23.37	6	A	C
ATOM	982	NE	ARG	A	125	-27.721	17.075	13.276	1.00	23.83	7	A	N
ATOM	983	CZ	ARG	A	125	-27.222	16.398	14.284	1.00	23.43	6	A	C
ATOM	984	NH1	ARG	A	125	-26.511	15.298	14.146	1.00	21.68	7	A	N
ATOM	985	NH2	ARG	A	125	-27.468	16.854	15.515	1.00	25.58	7	A	N
ATOM	986	N	ASN	A	126	-23.897	19.252	9.171	1.00	21.56	7	A	N
ATOM	987	CA	ASN	A	126	-23.448	18.810	7.846	1.00	21.51	6	A	C
ATOM	988	C	ASN	A	126	-21.950	18.524	7.767	1.00	22.32	6	A	C
ATOM	989	O	ASN	A	126	-21.478	17.949	6.789	1.00	23.44	8	A	O
ATOM	990	CB	ASN	A	126	-23.879	19.782	6.726	1.00	22.42	6	A	C
ATOM	991	CG	ASN	A	126	-25.421	19.795	6.703	1.00	23.12	6	A	C
ATOM	992	OD1	ASN	A	126	-25.980	18.722	6.916	1.00	20.27	8	A	O
ATOM	993	ND2	ASN	A	126	-26.050	20.934	6.466	1.00	22.32	7	A	N
ATOM	994	N	SER	A	127	-21.166	18.956	8.741	1.00	20.68	7	A	N
ATOM	995	CA	SER	A	127	-19.749	18.655	8.818	1.00	21.72	6	A	C
ATOM	996	C	SER	A	127	-19.600	17.376	9.645	1.00	20.77	6	A	C
ATOM	997	O	SER	A	127	-19.038	16.378	9.189	1.00	21.44	8	A	O
ATOM	998	CB	SER	A	127	-18.996	19.812	9.489	1.00	21.57	6	A	C
ATOM	999	OG	SER	A	127	-17.631	19.424	9.527	1.00	25.16	8	A	O
ATOM	1000	N	LEU	A	128	-20.291	17.373	10.792	1.00	19.66	7	A	N
ATOM	1001	CA	LEU	A	128	-20.244	16.291	11.753	1.00	22.08	6	A	C
ATOM	1002	C	LEU	A	128	-20.681	14.943	11.255	1.00	19.34	6	A	C
ATOM	1003	O	LEU	A	128	-19.994	13.954	11.573	1.00	21.23	8	A	O
ATOM	1004	CB	LEU	A	128	-21.005	16.716	13.023	1.00	26.06	6	A	C
ATOM	1005	CG	LEU	A	128	-21.334	15.781	14.158	1.00	30.75	6	A	C
ATOM	1006	CD1	LEU	A	128	-21.528	16.570	15.480	1.00	32.44	6	A	C
ATOM	1007	CD2	LEU	A	128	-22.605	14.989	13.863	1.00	28.72	6	A	C
ATOM	1008	N	GLU	A	129	-21.703	14.855	10.450	1.00	18.12	7	A	N
ATOM	1009	CA	GLU	A	129	-22.244	13.579	9.988	1.00	20.13	6	A	C
ATOM	1010	C	GLU	A	129	-21.244	12.772	9.152	1.00	21.28	6	A	C
ATOM	1011	O	GLU	A	129	-21.245	11.540	9.192	1.00	20.96	8	A	O
ATOM	1012	CB	GLU	A	129	-23.516	13.865	9.171	1.00	17.88	6	A	C
ATOM	1013	CG	GLU	A	129	-24.630	14.267	10.185	1.00	20.39	6	A	C
ATOM	1014	CD	GLU	A	129	-25.141	13.155	11.052	1.00	21.93	6	A	C
ATOM	1015	OE1	GLU	A	129	-24.983	11.950	10.683	1.00	20.15	8	A	O
ATOM	1016	OE2	GLU	A	129	-25.684	13.468	12.168	1.00	21.34	8	A	O
ATOM	1017	N	ARG	A	130	-20.433	13.469	8.363	1.00	21.62	7	A	N

14/188

ATOM	1018	CA	ARG A 130	-19.441	12.829	7.504	1.00	17.86	6	A	C
ATOM	1019	C	ARG A 130	-18.084	12.743	8.146	1.00	18.22	6	A	C
ATOM	1020	O	ARG A 130	-17.375	11.744	7.905	1.00	17.50	8	A	O
ATOM	1021	CB	ARG A 130	-19.331	13.535	6.129	1.00	16.71	6	A	C
ATOM	1022	CG	ARG A 130	-18.403	12.879	5.115	1.00	16.77	6	A	C
ATOM	1023	CD	ARG A 130	-18.640	11.436	4.736	1.00	18.99	6	A	C
ATOM	1024	NE	ARG A 130	-17.499	10.808	4.045	1.00	17.15	7	A	N
ATOM	1025	CZ	ARG A 130	-17.410	9.496	3.842	1.00	17.07	6	A	C
ATOM	1026	NH1	ARG A 130	-18.373	8.669	4.262	1.00	15.16	7	A	N
ATOM	1027	NH2	ARG A 130	-16.358	8.933	3.246	1.00	14.88	7	A	N
ATOM	1028	N	SER A 131	-17.681	13.690	8.994	1.00	18.83	7	A	N
ATOM	1029	CA	SER A 131	-16.362	13.592	9.616	1.00	18.21	6	A	C
ATOM	1030	C	SER A 131	-16.285	12.514	10.676	1.00	19.72	6	A	C
ATOM	1031	O	SER A 131	-15.210	12.043	11.061	1.00	15.72	8	A	O
ATOM	1032	CB	SER A 131	-15.953	14.925	10.319	1.00	19.50	6	A	C
ATOM	1033	CG	SER A 131	-16.772	15.177	11.455	1.00	21.92	8	A	O
ATOM	1034	N	SER A 132	-17.479	12.069	11.109	1.00	20.67	7	A	N
ATOM	1035	CA	SER A 132	-17.497	11.074	12.180	1.00	20.80	6	A	C
ATOM	1036	C	SER A 132	-16.779	9.789	11.795	1.00	19.77	6	A	C
ATOM	1037	O	SER A 132	-16.928	9.312	10.665	1.00	19.80	8	A	O
ATOM	1038	CB	SER A 132	-18.982	10.746	12.491	1.00	20.46	6	A	C
ATOM	1039	CG	SER A 132	-19.035	9.548	13.245	1.00	18.95	8	A	O
ATOM	1040	N	ALA A 133	-16.080	9.224	12.778	1.00	17.16	7	A	N
ATOM	1041	CA	ALA A 133	-15.431	7.944	12.569	1.00	16.78	6	A	C
ATOM	1042	C	ALA A 133	-16.380	6.799	12.314	1.00	15.98	6	A	C
ATOM	1043	O	ALA A 133	-15.929	5.672	12.051	1.00	15.19	8	A	O
ATOM	1044	CB	ALA A 133	-14.352	7.674	13.604	1.00	15.05	6	A	C
ATOM	1045	N	ARG A 134	-17.678	7.010	12.262	1.00	15.46	7	A	N
ATOM	1046	CA	ARG A 134	-18.570	5.955	11.768	1.00	18.93	6	A	C
ATOM	1047	C	ARG A 134	-18.075	5.495	10.394	1.00	20.62	6	A	C
ATOM	1048	O	ARG A 134	-18.140	4.334	9.975	1.00	19.57	8	A	O
ATOM	1049	CB	ARG A 134	-20.001	6.517	11.634	1.00	17.16	6	A	C
ATOM	1050	CG	ARG A 134	-20.997	5.424	11.192	1.00	17.90	6	A	C
ATOM	1051	CD	ARG A 134	-21.226	4.318	12.194	1.00	20.45	6	A	C
ATOM	1052	NE	ARG A 134	-22.147	3.292	11.703	1.00	21.30	7	A	N
ATOM	1053	CZ	ARG A 134	-22.142	2.002	11.948	1.00	19.58	6	A	C
ATOM	1054	NH1	ARG A 134	-21.248	1.415	12.715	1.00	18.60	7	A	N
ATOM	1055	NH2	ARG A 134	-23.004	1.220	11.298	1.00	18.73	7	A	N
ATOM	1056	N	GLU A 135	-17.459	6.451	9.660	1.00	20.88	7	A	N
ATOM	1057	CA	GLU A 135	-16.991	6.119	8.318	1.00	22.31	6	A	C
ATOM	1058	C	GLU A 135	-15.940	5.011	8.342	1.00	23.24	6	A	C
ATOM	1059	O	GLU A 135	-15.760	4.360	7.306	1.00	21.59	8	A	O
ATOM	1060	CB	GLU A 135	-16.474	7.368	7.602	1.00	22.58	6	A	C
ATOM	1061	CG	GLU A 135	-15.856	7.206	6.239	1.00	20.08	6	A	C
ATOM	1062	CD	GLU A 135	-14.392	6.749	6.235	1.00	20.60	6	A	C
ATOM	1063	OE1	GLU A 135	-13.966	6.397	5.125	1.00	19.36	8	A	O
ATOM	1064	OE2	GLU A 135	-13.631	6.656	7.242	1.00	22.06	8	A	O
ATOM	1065	N	THR A 136	-15.180	4.863	9.428	1.00	20.18	7	A	N
ATOM	1066	CA	THR A 136	-14.117	3.878	9.423	1.00	18.96	6	A	C
ATOM	1067	C	THR A 136	-14.670	2.464	9.264	1.00	18.35	6	A	C
ATOM	1068	O	THR A 136	-13.911	1.574	8.877	1.00	17.53	8	A	O
ATOM	1069	CB	THR A 136	-13.222	3.981	10.660	1.00	19.12	6	A	C
ATOM	1070	OG1	THR A 136	-13.967	3.735	11.868	1.00	16.31	8	A	O
ATOM	1071	CG2	THR A 136	-12.616	5.368	10.816	1.00	19.91	6	A	C
ATOM	1072	N	THR A 137	-15.961	2.251	9.587	1.00	17.65	7	A	N
ATOM	1073	CA	THR A 137	-16.599	0.956	9.348	1.00	16.04	6	A	C
ATOM	1074	C	THR A 137	-16.346	0.529	7.896	1.00	18.34	6	A	C
ATOM	1075	O	THR A 137	-16.031	-0.627	7.625	1.00	17.76	8	A	O
ATOM	1076	CB	THR A 137	-18.144	1.158	9.531	1.00	18.19	6	A	C
ATOM	1077	OG1	THR A 137	-18.347	1.668	10.865	1.00	20.04	8	A	O
ATOM	1078	CG2	THR A 137	-18.947	-0.103	9.349	1.00	15.13	6	A	C
ATOM	1079	N	MET A 138	-16.487	1.470	6.927	1.00	18.41	7	A	N
ATOM	1080	CA	MET A 138	-16.352	1.054	5.518	1.00	17.77	6	A	C
ATOM	1081	C	MET A 138	-14.851	0.929	5.170	1.00	17.32	6	A	C
ATOM	1082	O	MET A 138	-14.472	0.118	4.312	1.00	16.64	8	A	O
ATOM	1083	CB	MET A 138	-17.024	2.033	4.544	1.00	17.78	6	A	C
ATOM	1084	CG	MET A 138	-18.509	2.283	4.924	1.00	21.13	6	A	C
ATOM	1085	SE	MET A 138	-19.284	0.362	4.989	1.00	41.67	34	A	SE
ATOM	1086	CE2	MET A 138	-19.179	-0.307	3.264	1.00	26.50	6	A	C
ATOM	1087	N	ARG A 139	-14.021	1.723	5.878	1.00	15.37	7	A	N
ATOM	1088	CA	ARG A 139	-12.585	1.512	5.609	1.00	17.15	6	A	C
ATOM	1089	C	ARG A 139	-12.149	0.124	6.073	1.00	18.63	6	A	C
ATOM	1090	O	ARG A 139	-11.225	-0.489	5.540	1.00	18.03	8	A	O
ATOM	1091	CB	ARG A 139	-11.702	2.566	6.283	1.00	20.01	6	A	C
ATOM	1092	CG	ARG A 139	-12.013	3.967	5.777	1.00	21.43	6	A	C
ATOM	1093	CD	ARG A 139	-10.982	4.965	6.259	1.00	19.71	6	A	C
ATOM	1094	NE	ARG A 139	-9.687	4.833	5.572	1.00	18.92	7	A	N
ATOM	1095	CZ	ARG A 139	-8.667	5.659	5.784	1.00	18.49	6	A	C
ATOM	1096	NH1	ARG A 139	-8.807	6.640	6.670	1.00	16.33	7	A	N

15/188

ATOM	1097	NH2	ARG	A	139	-7.498	5.517	5.108	1.00	18.09	7	A	N
ATOM	1098	N	VAL	A	140	-12.773	-0.399	7.133	1.00	17.25	7	A	N
ATOM	1099	CA	VAL	A	140	-12.443	-1.739	7.654	1.00	15.95	6	A	C
ATOM	1100	C	VAL	A	140	-13.038	-2.789	6.709	1.00	17.37	6	A	C
ATOM	1101	O	VAL	A	140	-12.496	-3.860	6.500	1.00	18.01	8	A	O
ATOM	1102	CB	VAL	A	140	-12.947	-1.858	9.104	1.00	15.48	6	A	C
ATOM	1103	CG1	VAL	A	140	-12.988	-3.320	9.629	1.00	15.48	6	A	C
ATOM	1104	CG2	VAL	A	140	-12.017	-1.052	10.051	1.00	12.17	6	A	C
ATOM	1105	N	ALA	A	141	-14.191	-2.464	6.108	1.00	15.16	7	A	N
ATOM	1106	CA	ALA	A	141	-14.783	-3.419	5.144	1.00	17.03	6	A	C
ATOM	1107	C	ALA	A	141	-13.845	-3.601	3.944	1.00	16.02	6	A	C
ATOM	1108	O	ALA	A	141	-13.615	-4.719	3.507	1.00	15.07	8	A	O
ATOM	1109	CB	ALA	A	141	-16.148	-2.891	4.725	1.00	16.27	6	A	C
ATOM	1110	N	VAL	A	142	-13.359	-2.449	3.448	1.00	15.86	7	A	N
ATOM	1111	CA	VAL	A	142	-12.446	-2.467	2.342	1.00	13.88	6	A	C
ATOM	1112	C	VAL	A	142	-11.189	-3.227	2.752	1.00	16.69	6	A	C
ATOM	1113	O	VAL	A	142	-10.703	-4.009	1.950	1.00	17.66	8	A	O
ATOM	1114	CB	VAL	A	142	-12.142	-1.052	1.836	1.00	15.54	6	A	C
ATOM	1115	CG1	VAL	A	142	-10.964	-1.054	0.828	1.00	14.00	6	A	C
ATOM	1116	CG2	VAL	A	142	-13.380	-0.472	1.110	1.00	12.69	6	A	C
ATOM	1117	N	GLY	A	143	-10.612	-2.903	3.925	1.00	16.00	7	A	N
ATOM	1118	CA	GLY	A	143	-9.442	-3.615	4.387	1.00	15.09	6	A	C
ATOM	1119	C	GLY	A	143	-9.654	-5.108	4.517	1.00	18.27	6	A	C
ATOM	1120	O	GLY	A	143	-8.696	-5.916	4.454	1.00	18.68	8	A	O
ATOM	1121	N	ALA	A	144	-10.894	-5.549	4.789	1.00	17.17	7	A	N
ATOM	1122	CA	ALA	A	144	-11.107	-6.993	4.889	1.00	18.79	6	A	C
ATOM	1123	C	ALA	A	144	-10.968	-7.673	3.511	1.00	19.77	6	A	C
ATOM	1124	O	ALA	A	144	-10.555	-8.829	3.395	1.00	18.68	8	A	O
ATOM	1125	CB	ALA	A	144	-12.472	-7.252	5.493	1.00	16.81	6	A	C
ATOM	1126	N	VAL	A	145	-11.401	-6.993	2.428	1.00	19.14	7	A	N
ATOM	1127	CA	VAL	A	145	-11.223	-7.548	1.075	1.00	18.90	6	A	C
ATOM	1128	C	VAL	A	145	-9.721	-7.599	0.772	1.00	17.23	6	A	C
ATOM	1129	O	VAL	A	145	-9.206	-8.603	0.310	1.00	16.80	8	A	O
ATOM	1130	CB	VAL	A	145	-11.871	-6.689	-0.006	1.00	18.67	6	A	C
ATOM	1131	CG1	VAL	A	145	-11.761	-7.292	-1.422	1.00	18.98	6	A	C
ATOM	1132	CG2	VAL	A	145	-13.336	-6.495	0.419	1.00	21.07	6	A	C
ATOM	1133	N	ALA	A	146	-9.022	-6.495	1.066	1.00	17.02	7	A	N
ATOM	1134	CA	ALA	A	146	-7.583	-6.471	0.868	1.00	18.50	6	A	C
ATOM	1135	C	ALA	A	146	-6.911	-7.608	1.652	1.00	17.58	6	A	C
ATOM	1136	O	ALA	A	146	-6.006	-8.279	1.155	1.00	16.50	8	A	O
ATOM	1137	CB	ALA	A	146	-6.990	-5.165	1.411	1.00	17.90	6	A	C
ATOM	1138	N	LYS	A	147	-7.346	-7.801	2.905	1.00	16.28	7	A	N
ATOM	1139	CA	LYS	A	147	-6.729	-8.834	3.734	1.00	17.91	6	A	C
ATOM	1140	C	LYS	A	147	-6.950	-10.205	3.100	1.00	19.19	6	A	C
ATOM	1141	O	LYS	A	147	-6.136	-11.112	3.271	1.00	16.62	8	A	O
ATOM	1142	CB	LYS	A	147	-7.262	-8.855	5.181	1.00	19.45	6	A	C
ATOM	1143	CG	LYS	A	147	-6.619	-7.779	6.058	1.00	19.34	6	A	C
ATOM	1144	CD	LYS	A	147	-7.382	-7.641	7.360	1.00	19.49	6	A	C
ATOM	1145	CE	LYS	A	147	-7.408	-8.947	8.172	1.00	20.97	6	A	C
ATOM	1146	NZ	LYS	A	147	-8.205	-8.697	9.430	1.00	20.78	7	A	N
ATOM	1147	N	ARG	A	148	-8.085	-10.398	2.452	1.00	19.30	7	A	N
ATOM	1148	CA	ARG	A	148	-8.293	-11.705	1.790	1.00	21.78	6	A	C
ATOM	1149	C	ARG	A	148	-7.265	-11.919	0.688	1.00	21.96	6	A	C
ATOM	1150	O	ARG	A	148	-6.764	-13.044	0.506	1.00	22.68	8	A	O
ATOM	1151	CB	ARG	A	148	-9.709	-11.834	1.264	1.00	23.43	6	A	C
ATOM	1152	CG	ARG	A	148	-10.745	-12.162	2.316	1.00	23.95	6	A	C
ATOM	1153	CD	ARG	A	148	-10.649	-13.651	2.730	1.00	27.04	6	A	C
ATOM	1154	NE	ARG	A	148	-10.636	-14.377	1.441	1.00	26.62	7	A	N
ATOM	1155	CZ	ARG	A	148	-9.736	-15.347	1.178	1.00	27.10	6	A	C
ATOM	1156	NH1	ARG	A	148	-8.848	-15.682	2.112	1.00	23.95	7	A	N
ATOM	1157	NH2	ARG	A	148	-9.738	-15.879	-0.047	1.00	24.37	7	A	N
ATOM	1158	N	LEU	A	149	-6.881	-10.891	-0.046	1.00	21.77	7	A	N
ATOM	1159	CA	LEU	A	149	-5.853	-11.024	-1.076	1.00	22.55	6	A	C
ATOM	1160	C	LEU	A	149	-4.508	-11.386	-0.424	1.00	21.79	6	A	C
ATOM	1161	O	LEU	A	149	-3.783	-12.283	-0.878	1.00	20.80	8	A	O
ATOM	1162	CB	LEU	A	149	-5.666	-9.741	-1.861	1.00	22.38	6	A	C
ATOM	1163	CG	LEU	A	149	-6.631	-9.476	-3.028	1.00	25.63	6	A	C
ATOM	1164	CD1	LEU	A	149	-6.619	-7.987	-3.365	1.00	25.45	6	A	C
ATOM	1165	CD2	LEU	A	149	-6.212	-10.315	-4.245	1.00	23.77	6	A	C
ATOM	1166	N	LEU	A	150	-4.185	-10.686	0.656	1.00	18.67	7	A	N
ATOM	1167	CA	LEU	A	150	-2.952	-10.933	1.380	1.00	20.65	6	A	C
ATOM	1168	C	LEU	A	150	-2.877	-12.402	1.866	1.00	19.61	6	A	C
ATOM	1169	O	LEU	A	150	-1.798	-12.988	1.784	1.00	18.10	8	A	O
ATOM	1170	CB	LEU	A	150	-2.793	-10.049	2.613	1.00	18.91	6	A	C
ATOM	1171	CG	LEU	A	150	-2.743	-8.520	2.357	1.00	21.96	6	A	C
ATOM	1172	CD1	LEU	A	150	-2.366	-7.795	3.653	1.00	20.69	6	A	C
ATOM	1173	CD2	LEU	A	150	-1.785	-8.200	1.235	1.00	22.88	6	A	C
ATOM	1174	N	ALA	A	151	-4.011	-12.861	2.403	1.00	19.29	7	A	N
ATOM	1175	CA	ALA	A	151	-4.043	-14.243	2.900	1.00	21.98	6	A	C

16/188

ATOM	1176	C	ALA A 151	-3.807	-15.237	1.743	1.00	22.20	6	A	C
ATOM	1177	O	ALA A 151	-3.137	-16.226	1.922	1.00	21.49	8	A	O
ATOM	1178	CB	ALA A 151	-5.394	-14.585	3.483	1.00	22.15	6	A	C
ATOM	1179	N	GLU A 152	-4.363	-14.946	0.581	1.00	21.89	7	A	C
ATOM	1180	CA	GLU A 152	-4.144	-15.831	-0.578	1.00	23.34	6	A	C
ATOM	1181	C	GLU A 152	-2.666	-15.810	-0.967	1.00	22.98	6	A	C
ATOM	1182	O	GLU A 152	-2.244	-16.796	-1.567	1.00	21.62	8	A	O
ATOM	1183	CB	GLU A 152	-5.013	-15.466	-1.761	1.00	23.50	6	A	C
ATOM	1184	CG	GLU A 152	-6.497	-15.648	-1.519	1.00	25.34	6	A	C
ATOM	1185	CD	GLU A 152	-6.927	-17.103	-1.667	1.00	28.39	6	A	C
ATOM	1186	OE1	GLU A 152	-8.058	-17.386	-1.241	1.00	26.64	8	A	O
ATOM	1187	OE2	GLU A 152	-6.208	-17.970	-2.203	1.00	27.02	8	A	O
ATOM	1188	N	LEU A 153	-1.943	-14.760	-0.632	1.00	18.43	7	A	C
ATOM	1189	CA	LEU A 153	-0.530	-14.700	-0.949	1.00	22.22	6	A	C
ATOM	1190	C	LEU A 153	0.364	-15.029	0.229	1.00	22.27	6	A	C
ATOM	1191	O	LEU A 153	1.520	-14.641	0.233	1.00	23.19	8	A	O
ATOM	1192	CB	LEU A 153	-0.161	-13.300	-1.524	1.00	20.89	6	A	C
ATOM	1193	CG	LEU A 153	-1.033	-12.913	-2.739	1.00	21.72	6	A	C
ATOM	1194	CD1	LEU A 153	-0.792	-11.427	-3.069	1.00	22.91	6	A	C
ATOM	1195	CD2	LEU A 153	-0.858	-13.741	-3.972	1.00	17.71	6	A	C
ATOM	1196	N	ASP A 154	-0.116	-15.742	1.231	1.00	25.26	7	A	C
ATOM	1197	CA	ASP A 154	0.617	-16.194	2.392	1.00	27.38	6	A	C
ATOM	1198	C	ASP A 154	1.214	-15.065	3.209	1.00	26.53	6	A	C
ATOM	1199	O	ASP A 154	2.368	-15.199	3.643	1.00	27.49	8	A	O
ATOM	1200	CB	ASP A 154	1.784	-17.123	1.984	1.00	30.57	6	A	C
ATOM	1201	CG	ASP A 154	1.285	-18.278	1.147	1.00	34.65	6	A	C
ATOM	1202	OD1	ASP A 154	0.280	-18.890	1.564	1.00	35.74	8	A	O
ATOM	1203	OD2	ASP A 154	1.890	-18.541	0.073	1.00	38.84	8	A	O
ATOM	1204	N	MET A 155	0.518	-13.955	3.331	1.00	23.93	7	A	C
ATOM	1205	CA	MET A 155	1.005	-12.842	4.127	1.00	24.10	6	A	C
ATOM	1206	C	MET A 155	0.066	-12.756	5.349	1.00	25.01	6	A	C
ATOM	1207	O	MET A 155	-1.058	-13.288	5.271	1.00	25.47	8	A	O
ATOM	1208	CB	MET A 155	0.999	-11.552	3.334	1.00	21.46	6	A	C
ATOM	1209	CG	MET A 155	2.050	-11.645	2.213	1.00	22.61	6	A	C
ATOM	1210	SE	MET A 155	1.694	-10.110	1.104	1.00	41.81	34	A	SE
ATOM	1211	CE2	MET A 155	2.237	-9.047	1.869	1.00	24.14	6	A	C
ATOM	1212	N	GLU A 156	0.562	-12.194	6.432	1.00	25.19	7	A	C
ATOM	1213	CA	GLU A 156	-0.267	-12.154	7.661	1.00	24.94	6	A	C
ATOM	1214	C	GLU A 156	-0.214	-10.754	8.239	1.00	21.45	6	A	C
ATOM	1215	O	GLU A 156	0.802	-10.105	8.056	1.00	22.23	8	A	O
ATOM	1216	CB	GLU A 156	0.387	-13.086	8.690	1.00	26.08	6	A	C
ATOM	1217	CG	GLU A 156	0.327	-14.581	8.424	1.00	30.62	6	A	C
ATOM	1218	CD	GLU A 156	0.897	-15.262	9.674	1.00	33.51	6	A	C
ATOM	1219	OE1	GLU A 156	2.116	-15.268	9.877	1.00	35.61	8	A	O
ATOM	1220	OE2	GLU A 156	0.130	-15.737	10.509	1.00	35.13	8	A	O
ATOM	1221	N	ILE A 157	-1.227	-10.291	8.943	1.00	20.65	7	A	C
ATOM	1222	CA	ILE A 157	-1.218	-8.961	9.510	1.00	19.90	6	A	C
ATOM	1223	C	ILE A 157	-1.850	-8.995	10.898	1.00	19.28	6	A	C
ATOM	1224	O	ILE A 157	-2.722	-9.798	11.196	1.00	19.31	8	A	O
ATOM	1225	CB	ILE A 157	-1.869	-7.938	8.538	1.00	19.79	6	A	C
ATOM	1226	CG1	ILE A 157	-1.714	-6.515	9.046	1.00	18.65	6	A	C
ATOM	1227	CG2	ILE A 157	-3.381	-8.126	8.368	1.00	19.50	6	A	C
ATOM	1228	CD1	ILE A 157	-2.068	-5.476	7.996	1.00	20.25	6	A	C
ATOM	1229	N	ALA A 158	-1.402	-8.100	11.759	1.00	21.01	7	A	C
ATOM	1230	CA	ALA A 158	-1.953	-8.021	13.111	1.00	21.28	6	A	C
ATOM	1231	C	ALA A 158	-1.768	-6.606	13.654	1.00	20.30	6	A	C
ATOM	1232	O	ALA A 158	-0.896	-5.891	13.145	1.00	17.29	8	A	O
ATOM	1233	CB	ALA A 158	-1.233	-9.034	13.997	1.00	20.29	6	A	C
ATOM	1234	N	ASN A 159	-2.530	-6.234	14.677	1.00	17.41	7	A	C
ATOM	1235	CA	ASN A 159	-2.302	-4.913	15.294	1.00	16.80	6	A	C
ATOM	1236	C	ASN A 159	-2.396	-5.106	16.830	1.00	18.25	6	A	C
ATOM	1237	O	ASN A 159	-3.072	-6.001	17.306	1.00	17.88	8	A	O
ATOM	1238	CB	ASN A 159	-3.234	-3.794	14.877	1.00	17.31	6	A	C
ATOM	1239	CG	ASN A 159	-4.624	-3.890	15.531	1.00	18.76	6	A	C
ATOM	1240	OD1	ASN A 159	-4.783	-3.228	16.569	1.00	18.94	8	A	O
ATOM	1241	ND2	ASN A 159	-5.522	-4.694	14.978	1.00	18.14	7	A	C
ATOM	1242	N	HIS A 160	-1.699	-4.288	17.591	1.00	18.00	7	A	C
ATOM	1243	CA	HIS A 160	-1.828	-4.292	19.034	1.00	21.21	6	A	C
ATOM	1244	C	HIS A 160	-1.529	-2.903	19.580	1.00	21.91	6	A	C
ATOM	1245	O	HIS A 160	-0.809	-2.133	18.941	1.00	20.54	8	A	O
ATOM	1246	CB	HIS A 160	-0.898	-5.329	19.647	1.00	18.72	6	A	C
ATOM	1247	CG	HIS A 160	0.577	-5.212	19.417	1.00	20.56	6	A	C
ATOM	1248	ND1	HIS A 160	1.464	-5.404	20.445	1.00	21.54	7	A	C
ATOM	1249	CD2	HIS A 160	1.331	-4.964	18.312	1.00	19.46	6	A	C
ATOM	1250	CE1	HIS A 160	2.723	-5.274	19.988	1.00	22.85	6	A	C
ATOM	1251	NE2	HIS A 160	2.643	-5.007	18.679	1.00	21.92	7	A	C
ATOM	1252	N	VAL A 161	-2.074	-2.655	20.766	1.00	21.62	7	A	C
ATOM	1253	CA	VAL A 161	-1.838	-1.397	21.455	1.00	21.45	6	A	C
ATOM	1254	C	VAL A 161	-0.488	-1.467	22.153	1.00	23.35	6	A	C

17/188

ATOM	1255	O	VAL A 161	-0.263	-2.388	22.940	1.00	23.97	8	A	O
ATOM	1256	CB	VAL A 161	-2.937	-1.083	22.507	1.00	21.45	6	A	C
ATOM	1257	CG1	VAL A 161	-2.551	0.069	23.429	1.00	19.66	6	A	C
ATOM	1258	CG2	VAL A 161	-4.213	-0.788	21.732	1.00	19.47	6	A	C
ATOM	1259	N	VAL A 162	0.382	-0.504	21.869	1.00	20.24	7	A	N
ATOM	1260	CA	VAL A 162	1.687	-0.520	22.540	1.00	22.59	6	A	C
ATOM	1261	C	VAL A 162	1.752	0.618	23.551	1.00	22.87	6	A	C
ATOM	1262	O	VAL A 162	2.613	0.588	24.449	1.00	25.50	8	A	O
ATOM	1263	CB	VAL A 162	2.895	-0.476	21.606	1.00	21.85	6	A	C
ATOM	1264	CG1	VAL A 162	3.086	-1.824	20.886	1.00	20.45	6	A	C
ATOM	1265	CG2	VAL A 162	2.838	0.624	20.572	1.00	19.46	6	A	C
ATOM	1266	N	VAL A 163	0.952	1.633	23.379	1.00	21.56	7	A	N
ATOM	1267	CA	VAL A 163	0.908	2.698	24.417	1.00	21.59	6	A	C
ATOM	1268	C	VAL A 163	-0.560	2.956	24.654	1.00	20.50	6	A	C
ATOM	1269	O	VAL A 163	-1.295	3.241	23.704	1.00	19.22	8	A	O
ATOM	1270	CB	VAL A 163	1.642	3.988	24.049	1.00	22.38	6	A	C
ATOM	1271	CG1	VAL A 163	1.474	5.100	25.091	1.00	23.49	6	A	C
ATOM	1272	CG2	VAL A 163	3.120	3.717	23.826	1.00	21.54	6	A	C
ATOM	1273	N	PHE A 164	-1.030	2.938	25.895	1.00	22.01	7	A	N
ATOM	1274	CA	PHE A 164	-2.426	3.211	26.204	1.00	22.00	6	A	C
ATOM	1275	C	PHE A 164	-2.522	4.386	27.172	1.00	23.86	6	A	C
ATOM	1276	O	PHE A 164	-2.153	4.297	28.354	1.00	22.93	8	A	O
ATOM	1277	CB	PHE A 164	-3.108	1.962	26.795	1.00	22.80	6	A	C
ATOM	1278	CG	PHE A 164	-4.539	1.789	26.395	1.00	22.52	6	A	C
ATOM	1279	CD1	PHE A 164	-5.019	0.564	25.933	1.00	22.13	6	A	C
ATOM	1280	CD2	PHE A 164	-5.407	2.860	26.385	1.00	23.55	6	A	C
ATOM	1281	CE1	PHE A 164	-6.349	0.431	25.551	1.00	20.50	6	A	C
ATOM	1282	CE2	PHE A 164	-6.734	2.766	25.966	1.00	22.47	6	A	C
ATOM	1283	CZ	PHE A 164	-7.198	1.528	25.551	1.00	22.00	6	A	C
ATOM	1284	N	GLY A 165	-2.980	5.555	26.734	1.00	22.86	7	A	N
ATOM	1285	CA	GLY A 165	-3.066	6.724	27.613	1.00	25.60	6	A	C
ATOM	1286	C	GLY A 165	-1.800	6.994	28.404	1.00	26.49	6	A	C
ATOM	1287	O	GLY A 165	-1.820	7.427	29.561	1.00	24.73	8	A	O
ATOM	1288	N	GLY A 166	-0.639	6.720	27.803	1.00	27.69	7	A	N
ATOM	1289	CA	GLY A 166	0.631	6.982	28.499	1.00	26.79	6	A	C
ATOM	1290	C	GLY A 166	1.167	5.728	29.175	1.00	27.18	6	A	C
ATOM	1291	O	GLY A 166	2.351	5.707	29.525	1.00	26.72	8	A	O
ATOM	1292	N	LYS A 167	0.361	4.672	29.256	1.00	26.38	7	A	N
ATOM	1293	CA	LYS A 167	0.885	3.441	29.843	1.00	28.19	6	A	C
ATOM	1294	C	LYS A 167	1.601	2.638	28.759	1.00	29.18	6	A	C
ATOM	1295	O	LYS A 167	0.954	2.269	27.768	1.00	25.21	8	A	O
ATOM	1296	CB	LYS A 167	-0.248	2.636	30.492	1.00	29.08	6	A	C
ATOM	1297	CG	LYS A 167	-0.657	3.321	31.809	1.00	30.93	6	A	C
ATOM	1298	CD	LYS A 167	-1.519	2.453	32.673	1.00	31.10	6	A	C
ATOM	1299	CE	LYS A 167	-2.227	3.307	33.718	1.00	33.68	6	A	C
ATOM	1300	NZ	LYS A 167	-1.306	3.709	34.804	1.00	36.14	7	A	N
ATOM	1301	N	GLU A 168	2.923	2.534	28.859	1.00	30.51	7	A	N
ATOM	1302	CA	GLU A 168	3.700	1.815	27.879	1.00	32.24	6	A	C
ATOM	1303	C	GLU A 168	3.602	0.321	28.206	1.00	32.80	6	A	C
ATOM	1304	O	GLU A 168	3.870	-0.036	29.362	1.00	31.37	8	A	O
ATOM	1305	CB	GLU A 168	5.170	2.231	27.800	1.00	35.57	6	A	C
ATOM	1306	CG	GLU A 168	5.301	3.576	27.076	1.00	38.99	6	A	C
ATOM	1307	CD	GLU A 168	6.671	4.189	27.130	1.00	41.98	6	A	C
ATOM	1308	OE1	GLU A 168	7.161	4.703	26.099	1.00	43.95	8	A	O
ATOM	1309	OE2	GLU A 168	7.287	4.193	28.230	1.00	45.86	8	A	O
ATOM	1310	N	ILE A 169	3.114	-0.432	27.244	1.00	29.45	7	A	N
ATOM	1311	CA	ILE A 169	2.958	-1.871	27.375	1.00	32.03	6	A	C
ATOM	1312	C	ILE A 169	4.254	-2.604	27.098	1.00	36.12	6	A	C
ATOM	1313	O	ILE A 169	4.748	-2.468	26.002	1.00	34.14	8	A	O
ATOM	1314	CB	ILE A 169	1.928	-2.369	26.327	1.00	30.87	6	A	C
ATOM	1315	CG1	ILE A 169	0.634	-1.559	26.450	1.00	30.35	6	A	C
ATOM	1316	CG2	ILE A 169	1.696	-3.859	26.476	1.00	29.12	6	A	C
ATOM	1317	CD1	ILE A 169	0.114	-1.429	27.883	1.00	32.20	6	A	C
ATOM	1318	N	ASP A 170	4.793	-3.360	28.035	1.00	40.71	7	A	N
ATOM	1319	CA	ASP A 170	6.043	-4.075	27.810	1.00	44.92	6	A	C
ATOM	1320	C	ASP A 170	5.793	-5.338	26.997	1.00	45.95	6	A	C
ATOM	1321	O	ASP A 170	5.150	-6.283	27.449	1.00	46.45	8	A	O
ATOM	1322	CB	ASP A 170	6.684	-4.416	29.161	1.00	48.20	6	A	C
ATOM	1323	CG	ASP A 170	8.021	-5.089	28.897	1.00	51.83	6	A	C
ATOM	1324	OD1	ASP A 170	8.906	-4.408	28.316	1.00	54.01	8	A	O
ATOM	1325	OD2	ASP A 170	8.126	-6.281	29.260	1.00	53.35	8	A	O
ATOM	1326	N	VAL A 171	6.218	-5.292	25.743	1.00	46.24	7	A	N
ATOM	1327	CA	VAL A 171	6.005	-6.386	24.805	1.00	46.31	6	A	C
ATOM	1328	C	VAL A 171	7.169	-7.360	24.841	1.00	46.60	6	A	C
ATOM	1329	O	VAL A 171	8.318	-6.940	24.801	1.00	45.96	8	A	O
ATOM	1330	CB	VAL A 171	5.812	-5.738	23.415	1.00	45.86	6	A	C
ATOM	1331	CG1	VAL A 171	5.720	-6.768	22.312	1.00	44.79	6	A	C
ATOM	1332	CG2	VAL A 171	4.562	-4.852	23.464	1.00	45.66	6	A	C
ATOM	1333	N	PRO A 172	6.893	-8.651	24.903	1.00	47.35	7	A	N

18/188

ATOM	1334	CA	PRO A 172	7.922	-9.680	24.837	1.00	48.08	6	A	C
ATOM	1335	C	PRO A 172	8.782	-9.415	23.616	1.00	48.37	6	A	C
ATOM	1336	O	PRO A 172	8.377	-8.699	22.704	1.00	49.53	8	A	O
ATOM	1337	CB	PRO A 172	7.179	-10.993	24.674	1.00	47.57	6	A	C
ATOM	1338	CG	PRO A 172	5.816	-10.692	25.211	1.00	47.92	6	A	C
ATOM	1339	CD	PRO A 172	5.532	-9.245	24.885	1.00	47.21	6	A	C
ATOM	1340	N	GLU A 173	9.960	-9.987	23.543	1.00	49.47	7	A	N
ATOM	1341	CA	GLU A 173	10.835	-9.759	22.399	1.00	50.31	6	A	C
ATOM	1342	C	GLU A 173	10.474	-10.695	21.256	1.00	47.96	6	A	C
ATOM	1343	O	GLU A 173	10.161	-11.861	21.479	1.00	46.07	8	A	O
ATOM	1344	CB	GLU A 173	12.288	-9.978	22.835	1.00	54.42	6	A	C
ATOM	1345	CG	GLU A 173	12.748	-8.937	23.853	1.00	58.83	6	A	C
ATOM	1346	CD	GLU A 173	12.056	-9.067	25.199	1.00	61.80	6	A	C
ATOM	1347	OE1	GLU A 173	11.869	-10.214	25.674	1.00	63.18	8	A	O
ATOM	1348	OE2	GLU A 173	11.667	-8.016	25.762	1.00	63.84	8	A	O
ATOM	1349	N	ASP A 174	10.519	-10.145	20.061	1.00	45.86	7	A	N
ATOM	1350	CA	ASP A 174	10.351	-10.913	18.841	1.00	45.93	6	A	C
ATOM	1351	C	ASP A 174	9.135	-11.806	18.716	1.00	43.27	6	A	C
ATOM	1352	O	ASP A 174	9.218	-13.009	18.437	1.00	41.70	8	A	O
ATOM	1353	CB	ASP A 174	11.689	-11.646	18.625	1.00	48.20	6	A	C
ATOM	1354	CG	ASP A 174	12.774	-10.561	18.462	1.00	50.91	6	A	C
ATOM	1355	OD1	ASP A 174	12.709	-9.777	17.478	1.00	50.62	8	A	O
ATOM	1356	OD2	ASP A 174	13.638	-10.478	19.370	1.00	50.56	8	A	O
ATOM	1357	N	LEU A 175	7.965	-11.218	18.953	1.00	39.37	7	A	N
ATOM	1358	CA	LEU A 175	6.704	-11.926	18.742	1.00	37.97	6	A	C
ATOM	1359	C	LEU A 175	6.467	-12.012	17.223	1.00	35.98	6	A	C
ATOM	1360	O	LEU A 175	6.907	-11.134	16.473	1.00	35.09	8	A	O
ATOM	1361	CB	LEU A 175	5.496	-11.227	19.357	1.00	37.54	6	A	C
ATOM	1362	CG	LEU A 175	5.409	-11.000	20.853	1.00	37.45	6	A	C
ATOM	1363	CD1	LEU A 175	4.057	-10.419	21.292	1.00	37.05	6	A	C
ATOM	1364	CD2	LEU A 175	5.625	-12.271	21.656	1.00	38.26	6	A	C
ATOM	1365	N	THR A 176	5.863	-13.098	16.770	1.00	32.28	7	A	N
ATOM	1366	CA	THR A 176	5.519	-13.211	15.359	1.00	30.23	6	A	C
ATOM	1367	C	THR A 176	4.206	-12.480	15.120	1.00	28.40	6	A	C
ATOM	1368	O	THR A 176	3.519	-12.094	16.067	1.00	26.56	8	A	O
ATOM	1369	CB	THR A 176	5.285	-14.666	14.933	1.00	29.20	6	A	C
ATOM	1370	OG1	THR A 176	4.178	-15.097	15.730	1.00	31.49	8	A	O
ATOM	1371	CG2	THR A 176	6.543	-15.459	15.212	1.00	31.82	6	A	C
ATOM	1372	N	VAL A 177	3.836	-12.374	13.858	1.00	28.14	7	A	N
ATOM	1373	CA	VAL A 177	2.578	-11.669	13.566	1.00	27.41	6	A	C
ATOM	1374	C	VAL A 177	1.436	-12.462	14.184	1.00	26.25	6	A	C
ATOM	1375	O	VAL A 177	0.532	-11.926	14.815	1.00	23.59	8	A	O
ATOM	1376	CB	VAL A 177	2.415	-11.463	12.049	1.00	26.86	6	A	C
ATOM	1377	CG1	VAL A 177	1.042	-10.850	11.703	1.00	24.86	6	A	C
ATOM	1378	CG2	VAL A 177	3.489	-10.514	11.546	1.00	26.62	6	A	C
ATOM	1379	N	ALA A 178	1.525	-13.793	13.959	1.00	28.28	7	A	N
ATOM	1380	CA	ALA A 178	0.432	-14.647	14.456	1.00	28.08	6	A	C
ATOM	1381	C	ALA A 178	0.316	-14.618	15.969	1.00	27.52	6	A	C
ATOM	1382	O	ALA A 178	-0.795	-14.783	16.469	1.00	28.42	8	A	O
ATOM	1383	CB	ALA A 178	0.630	-16.060	13.943	1.00	29.92	6	A	C
ATOM	1384	N	GLU A 179	1.439	-14.463	16.656	1.00	27.85	7	A	N
ATOM	1385	CA	GLU A 179	1.424	-14.398	18.119	1.00	28.75	6	A	C
ATOM	1386	C	GLU A 179	0.674	-13.148	18.581	1.00	26.55	6	A	C
ATOM	1387	O	GLU A 179	-0.115	-13.091	19.517	1.00	25.99	8	A	O
ATOM	1388	CB	GLU A 179	2.875	-14.375	18.649	1.00	30.40	6	A	C
ATOM	1389	CG	GLU A 179	3.505	-15.790	18.597	1.00	35.49	6	A	C
ATOM	1390	CD	GLU A 179	4.948	-15.881	19.015	1.00	37.09	6	A	C
ATOM	1391	OE1	GLU A 179	5.661	-14.840	19.120	1.00	36.97	8	A	O
ATOM	1392	OE2	GLU A 179	5.433	-17.022	19.309	1.00	39.03	8	A	O
ATOM	1393	N	ILE A 180	1.059	-12.033	17.954	1.00	25.58	7	A	N
ATOM	1394	CA	ILE A 180	0.442	-10.736	18.220	1.00	23.95	6	A	C
ATOM	1395	C	ILE A 180	-1.049	-10.841	17.954	1.00	22.00	6	A	C
ATOM	1396	O	ILE A 180	-1.836	-10.394	18.797	1.00	24.26	8	A	O
ATOM	1397	CB	ILE A 180	1.046	-9.652	17.294	1.00	23.63	6	A	C
ATOM	1398	CG1	ILE A 180	2.476	-9.302	17.673	1.00	24.15	6	A	C
ATOM	1399	CG2	ILE A 180	0.170	-8.391	17.388	1.00	23.28	6	A	C
ATOM	1400	CD1	ILE A 180	3.105	-8.311	16.663	1.00	25.57	6	A	C
ATOM	1401	N	LYS A 181	-1.464	-11.404	16.831	1.00	23.46	7	A	N
ATOM	1402	CA	LYS A 181	-2.875	-11.526	16.509	1.00	24.71	6	A	C
ATOM	1403	C	LYS A 181	-3.606	-12.367	17.569	1.00	26.34	6	A	C
ATOM	1404	O	LYS A 181	-4.620	-11.932	18.103	1.00	23.78	8	A	O
ATOM	1405	CB	LYS A 181	-3.121	-12.140	15.142	1.00	27.08	6	A	C
ATOM	1406	CG	LYS A 181	-4.574	-12.088	14.692	1.00	29.25	6	A	C
ATOM	1407	CD	LYS A 181	-4.712	-12.713	13.306	1.00	32.83	6	A	C
ATOM	1408	CE	LYS A 181	-6.165	-12.947	12.910	1.00	34.32	6	A	C
ATOM	1409	NZ	LYS A 181	-7.006	-11.708	13.035	1.00	34.33	7	A	N
ATOM	1410	N	GLN A 182	-3.065	-13.534	17.882	1.00	27.94	7	A	N
ATOM	1411	CA	GLN A 182	-3.668	-14.368	18.929	1.00	31.86	6	A	C
ATOM	1412	C	GLN A 182	-3.741	-13.679	20.287	1.00	30.57	6	A	C

19/188

ATOM	1413	O	GLN A 182	-4.802	-13.541	20.912	1.00	29.34	8	A	O
ATOM	1414	CB	GLN A 182	-2.842	-15.665	19.006	1.00	36.20	6	A	C
ATOM	1415	CG	GLN A 182	-3.347	-16.651	20.034	1.00	42.64	6	A	C
ATOM	1416	CD	GLN A 182	-3.575	-18.046	19.484	1.00	47.41	6	A	C
ATOM	1417	OE1	GLN A 182	-2.720	-18.593	18.768	1.00	50.34	8	A	O
ATOM	1418	NE2	GLN A 182	-4.737	-18.629	19.811	1.00	48.40	7	A	N
ATOM	1419	N	ARG A 183	-2.600	-13.205	20.797	1.00	28.69	7	A	N
ATOM	1420	CA	ARG A 183	-2.610	-12.586	22.116	1.00	30.15	6	A	C
ATOM	1421	C	ARG A 183	-3.522	-11.362	22.150	1.00	28.84	6	A	C
ATOM	1422	O	ARG A 183	-4.323	-11.225	23.054	1.00	29.97	8	A	O
ATOM	1423	CB	ARG A 183	-1.216	-12.232	22.615	1.00	29.62	6	A	C
ATOM	1424	CG	ARG A 183	-0.396	-13.460	23.030	1.00	32.13	6	A	C
ATOM	1425	CD	ARG A 183	1.051	-13.054	23.232	1.00	32.62	6	A	C
ATOM	1426	NE	ARG A 183	1.956	-14.192	23.106	1.00	36.83	7	A	N
ATOM	1427	CZ	ARG A 183	3.212	-14.229	23.562	1.00	36.61	6	A	C
ATOM	1428	NH1	ARG A 183	3.790	-13.224	24.216	1.00	34.95	7	A	N
ATOM	1429	NH2	ARG A 183	3.907	-15.321	23.290	1.00	36.44	7	A	N
ATOM	1430	N	ALA A 184	-3.358	-10.462	21.193	1.00	28.60	7	A	N
ATOM	1431	CA	ALA A 184	-4.176	-9.273	21.165	1.00	26.67	6	A	C
ATOM	1432	C	ALA A 184	-5.671	-9.552	21.143	1.00	28.22	6	A	C
ATOM	1433	O	ALA A 184	-6.389	-8.826	21.863	1.00	27.13	8	A	O
ATOM	1434	CB	ALA A 184	-3.827	-8.315	20.039	1.00	26.70	6	A	C
ATOM	1435	N	ALA A 185	-6.212	-10.532	20.415	1.00	29.72	7	A	N
ATOM	1436	CA	ALA A 185	-7.689	-10.450	20.560	1.00	33.86	6	A	C
ATOM	1437	C	ALA A 185	-8.198	-11.316	21.683	1.00	34.19	6	A	C
ATOM	1438	O	ALA A 185	-9.412	-11.291	21.915	1.00	34.98	8	A	O
ATOM	1439	CB	ALA A 185	-8.387	-10.282	19.242	1.00	36.16	6	A	C
ATOM	1440	N	GLN A 186	-7.321	-11.803	22.565	1.00	33.66	7	A	N
ATOM	1441	CA	GLN A 186	-7.780	-12.420	23.813	1.00	33.03	6	A	C
ATOM	1442	C	GLN A 186	-7.960	-11.279	24.809	1.00	31.86	6	A	C
ATOM	1443	O	GLN A 186	-8.446	-11.445	25.916	1.00	31.81	8	A	O
ATOM	1444	CB	GLN A 186	-6.819	-13.491	24.377	1.00	32.99	6	A	C
ATOM	1445	CG	GLN A 186	-6.811	-14.644	23.381	1.00	33.21	6	A	C
ATOM	1446	CD	GLN A 186	-5.980	-15.856	23.693	1.00	35.78	6	A	C
ATOM	1447	OE1	GLN A 186	-5.836	-16.765	22.851	1.00	35.86	8	A	O
ATOM	1448	NE2	GLN A 186	-5.437	-15.894	24.892	1.00	32.99	7	A	N
ATOM	1449	N	SER A 187	-7.545	-10.081	24.386	1.00	28.14	7	A	N
ATOM	1450	CA	SER A 187	-7.614	-8.919	25.246	1.00	26.35	6	A	C
ATOM	1451	C	SER A 187	-8.777	-8.007	24.890	1.00	26.64	6	A	C
ATOM	1452	O	SER A 187	-8.908	-7.675	23.711	1.00	27.01	8	A	O
ATOM	1453	CB	SER A 187	-6.291	-8.130	25.146	1.00	23.56	6	A	C
ATOM	1454	OG	SER A 187	-6.404	-6.893	25.828	1.00	22.67	8	A	O
ATOM	1455	N	GLU A 188	-9.479	-7.439	25.854	1.00	26.63	7	A	N
ATOM	1456	CA	GLU A 188	-10.524	-6.464	25.559	1.00	27.57	6	A	C
ATOM	1457	C	GLU A 188	-9.906	-5.086	25.263	1.00	24.99	6	A	C
ATOM	1458	O	GLU A 188	-10.679	-4.177	24.930	1.00	25.31	8	A	O
ATOM	1459	CB	GLU A 188	-11.429	-6.253	26.802	1.00	29.41	6	A	C
ATOM	1460	CG	GLU A 188	-12.207	-7.494	27.231	1.00	32.25	6	A	C
ATOM	1461	CD	GLU A 188	-13.027	-7.177	28.475	1.00	33.41	6	A	C
ATOM	1462	OE1	GLU A 188	-14.079	-6.511	28.405	1.00	33.20	8	A	O
ATOM	1463	OE2	GLU A 188	-12.594	-7.561	29.567	1.00	35.45	8	A	O
ATOM	1464	N	VAL A 189	-8.624	-4.939	25.431	1.00	21.07	7	A	N
ATOM	1465	CA	VAL A 189	-7.891	-3.700	25.148	1.00	22.19	6	A	C
ATOM	1466	C	VAL A 189	-6.764	-3.866	24.130	1.00	21.88	6	A	C
ATOM	1467	O	VAL A 189	-5.909	-3.003	23.958	1.00	20.79	8	A	O
ATOM	1468	CB	VAL A 189	-7.383	-2.947	26.388	1.00	21.30	6	A	C
ATOM	1469	CG1	VAL A 189	-8.599	-2.532	27.234	1.00	20.09	6	A	C
ATOM	1470	CG2	VAL A 189	-6.422	-3.693	27.311	1.00	20.56	6	A	C
ATOM	1471	N	SER A 190	-6.735	-4.972	23.407	1.00	21.89	7	A	N
ATOM	1472	CA	SER A 190	-5.796	-5.280	22.372	1.00	24.13	6	A	C
ATOM	1473	C	SER A 190	-4.347	-5.268	22.803	1.00	24.19	6	A	C
ATOM	1474	O	SER A 190	-3.508	-4.997	21.933	1.00	24.76	8	A	O
ATOM	1475	CB	SER A 190	-5.931	-4.323	21.148	1.00	22.85	6	A	C
ATOM	1476	OG	SER A 190	-7.187	-4.518	20.523	1.00	22.50	8	A	O
ATOM	1477	N	ILE A 191	-4.039	-5.701	24.035	1.00	22.39	7	A	N
ATOM	1478	CA	ILE A 191	-2.640	-5.713	24.435	1.00	22.22	6	A	C
ATOM	1479	C	ILE A 191	-2.189	-7.167	24.433	1.00	23.98	6	A	C
ATOM	1480	O	ILE A 191	-3.012	-8.052	24.656	1.00	23.67	8	A	O
ATOM	1481	CB	ILE A 191	-2.385	-5.046	25.791	1.00	24.43	6	A	C
ATOM	1482	CG1	ILE A 191	-3.160	-5.763	26.911	1.00	23.20	6	A	C
ATOM	1483	CG2	ILE A 191	-2.783	-3.569	25.739	1.00	22.19	6	A	C
ATOM	1484	CD1	ILE A 191	-2.796	-5.322	28.311	1.00	23.58	6	A	C
ATOM	1485	N	VAL A 192	-0.939	-7.414	24.138	1.00	23.13	7	A	N
ATOM	1486	CA	VAL A 192	-0.420	-8.755	24.081	1.00	26.14	6	A	C
ATOM	1487	C	VAL A 192	0.077	-9.216	25.459	1.00	30.58	6	A	C
ATOM	1488	O	VAL A 192	0.279	-10.429	25.567	1.00	31.21	8	A	O
ATOM	1489	CB	VAL A 192	0.697	-8.915	23.031	1.00	25.53	6	A	C
ATOM	1490	CG1	VAL A 192	0.174	-8.400	21.680	1.00	26.52	6	A	C
ATOM	1491	CG2	VAL A 192	1.946	-8.152	23.412	1.00	25.22	6	A	C

20/188

ATOM	1492	N	ASN	A	193	0.147	-8.368	26.462	1.00	31.40	7	A	N
ATOM	1493	CA	ASN	A	193	0.585	-8.797	27.799	1.00	35.10	6	A	C
ATOM	1494	C	ASN	A	193	-0.626	-8.776	28.726	1.00	36.22	6	A	C
ATOM	1495	O	ASN	A	193	-1.010	-7.694	29.118	1.00	35.57	8	A	O
ATOM	1496	CB	ASN	A	193	1.656	-7.854	28.310	1.00	36.34	6	A	C
ATOM	1497	CG	ASN	A	193	2.088	-8.064	29.745	1.00	39.04	6	A	C
ATOM	1498	OD1	ASN	A	193	3.026	-7.396	30.198	1.00	40.31	8	A	O
ATOM	1499	ND2	ASN	A	193	1.483	-8.960	30.505	1.00	37.62	7	A	N
ATOM	1500	N	GLN	A	194	-1.205	-9.903	29.115	1.00	39.84	7	A	N
ATOM	1501	CA	GLN	A	194	-2.396	-9.768	29.964	1.00	44.69	6	A	C
ATOM	1502	C	GLN	A	194	-2.179	-9.547	31.440	1.00	45.35	6	A	C
ATOM	1503	O	GLN	A	194	-3.190	-9.328	32.107	1.00	44.12	8	A	O
ATOM	1504	CB	GLN	A	194	-3.429	-10.848	29.640	1.00	47.96	6	A	C
ATOM	1505	CG	GLN	A	194	-4.431	-10.323	28.578	1.00	51.16	6	A	C
ATOM	1506	CD	GLN	A	194	-5.665	-11.210	28.577	1.00	53.98	6	A	C
ATOM	1507	OE1	GLN	A	194	-5.636	-12.369	28.137	1.00	56.31	8	A	O
ATOM	1508	NE2	GLN	A	194	-6.770	-10.693	29.101	1.00	53.82	7	A	N
ATOM	1509	N	GLU	A	195	-0.945	-9.409	31.919	1.00	46.32	7	A	N
ATOM	1510	CA	GLU	A	195	-0.768	-9.047	33.324	1.00	47.20	6	A	C
ATOM	1511	C	GLU	A	195	-1.250	-7.614	33.517	1.00	45.12	6	A	C
ATOM	1512	O	GLU	A	195	-1.635	-7.256	34.633	1.00	45.93	8	A	O
ATOM	1513	CB	GLU	A	195	0.697	-9.237	33.762	1.00	50.04	6	A	C
ATOM	1514	CG	GLU	A	195	1.103	-10.697	33.664	1.00	54.10	6	A	C
ATOM	1515	CD	GLU	A	195	2.489	-11.096	34.102	1.00	57.31	6	A	C
ATOM	1516	OE1	GLU	A	195	3.471	-10.323	33.934	1.00	58.11	8	A	O
ATOM	1517	OE2	GLU	A	195	2.638	-12.241	34.623	1.00	58.47	8	A	O
ATOM	1518	N	ARG	A	196	-1.316	-6.802	32.456	1.00	40.46	7	A	N
ATOM	1519	CA	ARG	A	196	-1.769	-5.429	32.644	1.00	36.82	6	A	C
ATOM	1520	C	ARG	A	196	-3.215	-5.195	32.238	1.00	32.75	6	A	C
ATOM	1521	O	ARG	A	196	-3.736	-4.092	32.395	1.00	31.77	8	A	O
ATOM	1522	CB	ARG	A	196	-0.775	-4.486	31.945	1.00	38.31	6	A	C
ATOM	1523	CG	ARG	A	196	0.594	-4.662	32.650	1.00	39.61	6	A	C
ATOM	1524	CD	ARG	A	196	1.502	-3.519	32.312	1.00	36.59	6	A	C
ATOM	1525	NE	ARG	A	196	1.065	-2.271	32.883	1.00	35.62	7	A	N
ATOM	1526	CZ	ARG	A	196	1.574	-1.083	32.549	1.00	36.48	6	A	C
ATOM	1527	NH1	ARG	A	196	2.541	-1.076	31.651	1.00	37.06	7	A	N
ATOM	1528	NH2	ARG	A	196	1.150	0.045	33.102	1.00	35.09	7	A	N
ATOM	1529	N	GLU	A	197	-3.911	-6.244	31.845	1.00	29.90	7	A	N
ATOM	1530	CA	GLU	A	197	-5.298	-6.135	31.389	1.00	28.82	6	A	C
ATOM	1531	C	GLU	A	197	-6.223	-5.458	32.369	1.00	29.04	6	A	C
ATOM	1532	O	GLU	A	197	-6.830	-4.417	32.038	1.00	27.52	8	A	O
ATOM	1533	CB	GLU	A	197	-5.837	-7.509	31.011	1.00	29.46	6	A	C
ATOM	1534	CG	GLU	A	197	-7.294	-7.570	30.537	1.00	29.53	6	A	C
ATOM	1535	CD	GLU	A	197	-7.359	-7.452	29.023	1.00	29.47	6	A	C
ATOM	1536	OE1	GLU	A	197	-6.300	-7.437	28.363	1.00	30.34	8	A	O
ATOM	1537	OE2	GLU	A	197	-8.460	-7.402	28.454	1.00	28.41	8	A	O
ATOM	1538	N	GLN	A	198	-6.328	-5.995	33.596	1.00	26.89	7	A	N
ATOM	1539	CA	GLN	A	198	-7.228	-5.325	34.546	1.00	28.01	6	A	C
ATOM	1540	C	GLN	A	198	-6.802	-3.900	34.833	1.00	26.43	6	A	C
ATOM	1541	O	GLN	A	198	-7.585	-2.968	34.987	1.00	25.28	8	A	O
ATOM	1542	CB	GLN	A	198	-7.260	-6.195	35.838	1.00	29.33	6	A	C
ATOM	1543	CG	GLN	A	198	-8.398	-5.702	36.733	1.00	31.52	6	A	C
ATOM	1544	CD	GLN	A	198	-9.754	-5.884	36.068	1.00	32.08	6	A	C
ATOM	1545	OE1	GLN	A	198	-10.066	-6.951	35.555	1.00	35.82	8	A	O
ATOM	1546	NE2	GLN	A	198	-10.551	-4.839	36.070	1.00	31.68	7	A	N
ATOM	1547	N	GLU	A	199	-5.490	-3.674	34.991	1.00	25.59	7	A	N
ATOM	1548	CA	GLU	A	199	-4.949	-2.335	35.212	1.00	26.17	6	A	C
ATOM	1549	C	GLU	A	199	-5.450	-1.337	34.174	1.00	23.76	6	A	C
ATOM	1550	O	GLU	A	199	-5.960	-0.269	34.484	1.00	22.05	8	A	O
ATOM	1551	CB	GLU	A	199	-3.414	-2.435	35.135	1.00	27.30	6	A	C
ATOM	1552	CG	GLU	A	199	-2.591	-1.226	35.504	1.00	31.63	6	A	C
ATOM	1553	CD	GLU	A	199	-1.119	-1.323	35.132	1.00	33.07	6	A	C
ATOM	1554	OE1	GLU	A	199	-0.525	-2.417	34.950	1.00	33.46	8	A	O
ATOM	1555	OE2	GLU	A	199	-0.503	-0.268	34.985	1.00	33.26	8	A	O
ATOM	1556	N	ILE	A	200	-5.311	-1.684	32.883	1.00	25.86	7	A	N
ATOM	1557	CA	ILE	A	200	-5.784	-0.773	31.811	1.00	24.49	6	A	C
ATOM	1558	C	ILE	A	200	-7.273	-0.577	31.874	1.00	23.27	6	A	C
ATOM	1559	O	ILE	A	200	-7.784	0.553	31.688	1.00	24.43	8	A	O
ATOM	1560	CB	ILE	A	200	-5.333	-1.283	30.430	1.00	25.69	6	A	C
ATOM	1561	CG1	ILE	A	200	-3.830	-1.486	30.392	1.00	28.44	6	A	C
ATOM	1562	CG2	ILE	A	200	-5.802	-0.347	29.313	1.00	23.68	6	A	C
ATOM	1563	CD1	ILE	A	200	-2.943	-0.322	30.766	1.00	32.21	6	A	C
ATOM	1564	N	LYS	A	201	-8.029	-1.673	32.122	1.00	23.01	7	A	N
ATOM	1565	CA	LYS	A	201	-9.482	-1.482	32.229	1.00	25.54	6	A	C
ATOM	1566	C	LYS	A	201	-9.794	-0.500	33.370	1.00	27.11	6	A	C
ATOM	1567	O	LYS	A	201	-10.534	0.459	33.155	1.00	25.64	8	A	O
ATOM	1568	CB	LYS	A	201	-10.308	-2.749	32.431	1.00	26.30	6	A	C
ATOM	1569	CG	LYS	A	201	-10.138	-3.737	31.291	1.00	27.97	6	A	C
ATOM	1570	CD	LYS	A	201	-10.788	-5.095	31.423	1.00	29.31	6	A	C

21/188

ATOM	1571	CE	LYS	A	201	-12.249	-4.938	31.827	1.00	31.23	6	A	C
ATOM	1572	NZ	LYS	A	201	-12.955	-6.258	31.785	1.00	31.12	7	A	N
ATOM	1573	N	ASP	A	202	-9.195	-0.746	34.540	1.00	25.78	7	A	N
ATOM	1574	CA	ASP	A	202	-9.397	0.193	35.641	1.00	28.08	6	A	C
ATOM	1575	C	ASP	A	202	-8.989	1.604	35.252	1.00	28.70	6	A	C
ATOM	1576	O	ASP	A	202	-9.714	2.557	35.497	1.00	31.13	8	A	O
ATOM	1577	CB	ASP	A	202	-8.646	-0.313	36.883	1.00	29.04	6	A	C
ATOM	1578	CG	ASP	A	202	-9.259	-1.617	37.414	1.00	28.39	6	A	C
ATOM	1579	OD1	ASP	A	202	-10.277	-2.132	36.924	1.00	28.25	8	A	O
ATOM	1580	OD2	ASP	A	202	-8.654	-2.230	38.300	1.00	26.07	8	A	O
ATOM	1581	N	TYR	A	203	-7.829	1.769	34.600	1.00	28.25	7	A	N
ATOM	1582	CA	TYR	A	203	-7.412	3.124	34.170	1.00	26.85	6	A	C
ATOM	1583	C	TYR	A	203	-8.446	3.732	33.239	1.00	26.40	6	A	C
ATOM	1584	O	TYR	A	203	-8.825	4.897	33.371	1.00	24.66	8	A	O
ATOM	1585	CB	TYR	A	203	-6.043	2.955	33.487	1.00	28.00	6	A	C
ATOM	1586	CG	TYR	A	203	-5.446	4.188	32.875	1.00	30.38	6	A	C
ATOM	1587	CD1	TYR	A	203	-5.415	5.373	33.604	1.00	31.89	6	A	C
ATOM	1588	CD2	TYR	A	203	-4.871	4.194	31.611	1.00	30.14	6	A	C
ATOM	1589	CE1	TYR	A	203	-4.865	6.538	33.094	1.00	32.61	6	A	C
ATOM	1590	CE2	TYR	A	203	-4.304	5.354	31.085	1.00	31.24	6	A	C
ATOM	1591	CZ	TYR	A	203	-4.295	6.504	31.827	1.00	32.16	6	A	C
ATOM	1592	OH	TYR	A	203	-3.749	7.671	31.342	1.00	33.54	8	A	O
ATOM	1593	N	ILE	A	204	-8.931	2.954	32.245	1.00	26.34	7	A	N
ATOM	1594	CA	ILE	A	204	-10.017	3.472	31.402	1.00	26.67	6	A	C
ATOM	1595	C	ILE	A	204	-11.193	3.931	32.237	1.00	28.63	6	A	C
ATOM	1596	O	ILE	A	204	-11.795	4.975	31.975	1.00	27.10	8	A	O
ATOM	1597	CB	ILE	A	204	-10.465	2.426	30.355	1.00	27.13	6	A	C
ATOM	1598	CG1	ILE	A	204	-9.314	2.266	29.326	1.00	26.04	6	A	C
ATOM	1599	CG2	ILE	A	204	-11.747	2.826	29.624	1.00	26.31	6	A	C
ATOM	1600	CD1	ILE	A	204	-9.425	0.944	28.573	1.00	25.83	6	A	C
ATOM	1601	N	ASP	A	205	-11.562	3.089	33.239	1.00	30.46	7	A	N
ATOM	1602	CA	ASP	A	205	-12.712	3.504	34.077	1.00	31.16	6	A	C
ATOM	1603	C	ASP	A	205	-12.390	4.833	34.766	1.00	31.06	6	A	C
ATOM	1604	O	ASP	A	205	-13.215	5.721	34.895	1.00	29.76	8	A	O
ATOM	1605	CB	ASP	A	205	-13.008	2.458	35.137	1.00	32.09	6	A	C
ATOM	1606	CG	ASP	A	205	-13.591	1.168	34.585	1.00	32.93	6	A	C
ATOM	1607	OD1	ASP	A	205	-14.151	1.220	33.484	1.00	29.92	8	A	O
ATOM	1608	OD2	ASP	A	205	-13.543	0.123	35.271	1.00	34.73	8	A	O
ATOM	1609	N	GLN	A	206	-11.167	4.914	35.286	1.00	33.49	7	A	N
ATOM	1610	CA	GLN	A	206	-10.778	6.123	36.041	1.00	36.06	6	A	C
ATOM	1611	C	GLN	A	206	-10.900	7.342	35.142	1.00	36.31	6	A	C
ATOM	1612	O	GLN	A	206	-11.582	8.339	35.469	1.00	35.78	8	A	O
ATOM	1613	CB	GLN	A	206	-9.408	5.915	36.661	1.00	39.17	6	A	C
ATOM	1614	CG	GLN	A	206	-8.917	7.053	37.542	1.00	44.76	6	A	C
ATOM	1615	CD	GLN	A	206	-9.791	7.382	38.731	1.00	47.12	6	A	C
ATOM	1616	OE1	GLN	A	206	-9.965	6.560	39.636	1.00	48.86	8	A	O
ATOM	1617	NE2	GLN	A	206	-10.385	8.573	38.797	1.00	49.24	7	A	N
ATOM	1618	N	ILE	A	207	-10.383	7.190	33.907	1.00	33.74	7	A	N
ATOM	1619	CA	ILE	A	207	-10.482	8.312	32.965	1.00	32.10	6	A	C
ATOM	1620	C	ILE	A	207	-11.932	8.712	32.786	1.00	31.49	6	A	C
ATOM	1621	O	ILE	A	207	-12.327	9.873	32.649	1.00	31.56	8	A	O
ATOM	1622	CB	ILE	A	207	-9.869	7.891	31.618	1.00	31.14	6	A	C
ATOM	1623	CG1	ILE	A	207	-8.361	7.712	31.747	1.00	29.65	6	A	C
ATOM	1624	CG2	ILE	A	207	-10.206	8.843	30.490	1.00	32.01	6	A	C
ATOM	1625	CD1	ILE	A	207	-7.596	9.006	31.961	1.00	30.06	6	A	C
ATOM	1626	N	LYS	A	208	-12.769	7.704	32.591	1.00	31.13	7	A	N
ATOM	1627	CA	LYS	A	208	-14.188	7.959	32.403	1.00	33.35	6	A	C
ATOM	1628	C	LYS	A	208	-14.806	8.652	33.617	1.00	35.19	6	A	C
ATOM	1629	O	LYS	A	208	-15.684	9.503	33.464	1.00	35.03	8	A	O
ATOM	1630	CB	LYS	A	208	-14.896	6.641	32.113	1.00	33.44	6	A	C
ATOM	1631	CG	LYS	A	208	-16.352	6.747	31.754	1.00	33.52	6	A	C
ATOM	1632	CD	LYS	A	208	-17.023	5.382	31.769	1.00	34.52	6	A	C
ATOM	1633	CE	LYS	A	208	-18.540	5.513	31.593	1.00	35.10	6	A	C
ATOM	1634	NZ	LYS	A	208	-19.143	4.219	31.182	1.00	34.50	7	A	N
ATOM	1635	N	ARG	A	209	-14.475	8.234	34.834	1.00	38.36	7	A	N
ATOM	1636	CA	ARG	A	209	-15.184	8.909	35.953	1.00	41.33	6	A	C
ATOM	1637	C	ARG	A	209	-14.605	10.308	36.119	1.00	42.07	6	A	C
ATOM	1638	O	ARG	A	209	-15.281	11.209	36.596	1.00	42.90	8	A	O
ATOM	1639	CB	ARG	A	209	-15.271	8.076	37.183	1.00	42.45	6	A	C
ATOM	1640	CG	ARG	A	209	-14.002	7.763	37.925	1.00	43.56	6	A	C
ATOM	1641	CD	ARG	A	209	-14.360	6.623	38.920	1.00	44.88	6	A	C
ATOM	1642	NE	ARG	A	209	-13.133	5.824	38.983	1.00	45.45	7	A	N
ATOM	1643	CZ	ARG	A	209	-13.109	4.514	38.773	1.00	45.26	6	A	C
ATOM	1644	NH1	ARG	A	209	-14.217	3.840	38.533	1.00	43.18	7	A	N
ATOM	1645	NH2	ARG	A	209	-11.896	3.979	38.865	1.00	46.05	7	A	N
ATOM	1646	N	ASP	A	210	-13.372	10.445	35.642	1.00	42.51	7	A	N
ATOM	1647	CA	ASP	A	210	-12.711	11.734	35.660	1.00	41.67	6	A	C
ATOM	1648	C	ASP	A	210	-13.267	12.632	34.569	1.00	39.27	6	A	C
ATOM	1649	O	ASP	A	210	-12.903	13.802	34.607	1.00	39.53	8	A	O

22/188

ATOM	1650	CB	ASP	A	210	-11.203	11.587	35.522	1.00	44.55	6	A	C
ATOM	1651	CG	ASP	A	210	-10.565	11.207	36.849	1.00	46.73	6	A	C
ATOM	1652	OD1	ASP	A	210	-9.451	10.638	36.843	1.00	45.72	8	A	O
ATOM	1653	OD2	ASP	A	210	-11.198	11.439	37.915	1.00	48.47	8	A	O
ATOM	1654	N	GLY	A	211	-14.095	12.139	33.671	1.00	36.91	7	A	N
ATOM	1655	CA	GLY	A	211	-14.698	12.926	32.604	1.00	33.53	6	A	C
ATOM	1656	C	GLY	A	211	-13.718	13.240	31.466	1.00	32.50	6	A	C
ATOM	1657	O	GLY	A	211	-13.972	14.156	30.690	1.00	30.31	8	A	O
ATOM	1658	N	ASP	A	212	-12.592	12.535	31.399	1.00	32.16	7	A	N
ATOM	1659	CA	ASP	A	212	-11.590	12.802	30.354	1.00	30.98	6	A	C
ATOM	1660	C	ASP	A	212	-11.533	11.709	29.291	1.00	31.45	6	A	C
ATOM	1661	O	ASP	A	212	-12.386	10.793	29.258	1.00	29.59	8	A	O
ATOM	1662	CB	ASP	A	212	-10.252	13.049	31.044	1.00	31.63	6	A	C
ATOM	1663	CG	ASP	A	212	-9.406	14.131	30.391	1.00	31.58	6	A	C
ATOM	1664	OD1	ASP	A	212	-9.522	14.317	29.160	1.00	31.73	8	A	O
ATOM	1665	OD2	ASP	A	212	-8.658	14.851	31.087	1.00	33.76	8	A	O
ATOM	1666	N	THR	A	213	-10.538	11.815	28.390	1.00	29.10	7	A	N
ATOM	1667	CA	THR	A	213	-10.371	10.810	27.335	1.00	27.98	6	A	C
ATOM	1668	C	THR	A	213	-8.900	10.433	27.168	1.00	26.21	6	A	C
ATOM	1669	O	THR	A	213	-8.017	11.139	27.643	1.00	25.40	8	A	O
ATOM	1670	CB	THR	A	213	-10.888	11.288	25.979	1.00	26.54	6	A	C
ATOM	1671	OG1	THR	A	213	-10.208	12.495	25.571	1.00	25.73	8	A	O
ATOM	1672	CG2	THR	A	213	-12.391	11.550	25.972	1.00	26.13	6	A	C
ATOM	1673	N	ILE	A	214	-8.610	9.276	26.584	1.00	24.74	7	A	N
ATOM	1674	CA	ILE	A	214	-7.245	8.920	26.299	1.00	21.98	6	A	C
ATOM	1675	C	ILE	A	214	-7.150	8.384	24.869	1.00	21.50	6	A	C
ATOM	1676	O	ILE	A	214	-8.117	7.849	24.349	1.00	19.52	8	A	O
ATOM	1677	CB	ILE	A	214	-6.599	7.897	27.242	1.00	23.73	6	A	C
ATOM	1678	CG1	ILE	A	214	-7.548	6.728	27.511	1.00	21.70	6	A	C
ATOM	1679	CG2	ILE	A	214	-6.063	8.582	28.505	1.00	22.78	6	A	C
ATOM	1680	CD1	ILE	A	214	-6.918	5.694	28.462	1.00	22.02	6	A	C
ATOM	1681	N	GLY	A	215	-5.968	8.499	24.293	1.00	21.15	7	A	N
ATOM	1682	CA	GLY	A	215	-5.624	7.947	22.987	1.00	20.23	6	A	C
ATOM	1683	C	GLY	A	215	-4.464	6.976	23.256	1.00	20.29	6	A	C
ATOM	1684	O	GLY	A	215	-4.392	6.284	24.276	1.00	17.73	8	A	O
ATOM	1685	N	GLY	A	216	-3.475	6.926	22.377	1.00	20.46	7	A	N
ATOM	1686	CA	GLY	A	216	-2.354	6.046	22.580	1.00	21.44	6	A	C
ATOM	1687	C	GLY	A	216	-1.645	5.688	21.281	1.00	20.61	6	A	C
ATOM	1688	O	GLY	A	216	-1.701	6.477	20.342	1.00	18.74	8	A	O
ATOM	1689	N	VAL	A	217	-0.971	4.550	21.291	1.00	20.75	7	A	N
ATOM	1690	CA	VAL	A	217	-0.190	4.216	20.080	1.00	20.41	6	A	C
ATOM	1691	C	VAL	A	217	-0.508	2.778	19.730	1.00	19.56	6	A	C
ATOM	1692	O	VAL	A	217	-0.463	1.914	20.585	1.00	18.69	8	A	O
ATOM	1693	CB	VAL	A	217	1.313	4.373	20.325	1.00	20.07	6	A	C
ATOM	1694	CG1	VAL	A	217	2.159	3.912	19.145	1.00	18.55	6	A	C
ATOM	1695	CG2	VAL	A	217	1.647	5.827	20.671	1.00	19.21	6	A	C
ATOM	1696	N	VAL	A	218	-0.718	2.550	18.454	1.00	18.38	7	A	N
ATOM	1697	CA	VAL	A	218	-1.010	1.197	17.966	1.00	18.48	6	A	C
ATOM	1698	C	VAL	A	218	0.073	0.794	16.956	1.00	20.01	6	A	C
ATOM	1699	O	VAL	A	218	0.569	1.615	16.183	1.00	17.56	8	A	O
ATOM	1700	CB	VAL	A	218	-2.398	1.190	17.323	1.00	18.68	6	A	C
ATOM	1701	CG1AVAL	A	218	-2.537	-0.088	16.495	0.60	18.48	6	A	C	
ATOM	1702	CG1BVAL	A	218	-3.415	0.987	18.466	0.40	18.43	6	A	C	
ATOM	1703	CG2AVAL	A	218	-3.531	1.435	18.291	0.60	18.28	6	A	C	
ATOM	1704	CG2BVAL	A	218	-2.812	2.467	16.625	0.40	16.67	6	A	C	
ATOM	1705	N	GLU	A	219	0.408	-0.499	16.997	1.00	19.88	7	A	N
ATOM	1706	CA	GLU	A	219	1.435	-0.956	16.062	1.00	21.98	6	A	C
ATOM	1707	C	GLU	A	219	0.767	-2.020	15.160	1.00	22.77	6	A	C
ATOM	1708	O	GLU	A	219	0.127	-2.913	15.695	1.00	21.46	8	A	O
ATOM	1709	CB	GLU	A	219	2.584	-1.594	16.805	1.00	22.20	6	A	C
ATOM	1710	CG	GLU	A	219	3.759	-2.137	15.988	1.00	22.12	6	A	C
ATOM	1711	CD	GLU	A	219	4.822	-2.594	16.994	1.00	25.01	6	A	C
ATOM	1712	OE1	GLU	A	219	4.732	-3.748	17.485	1.00	25.86	8	A	O
ATOM	1713	OE2	GLU	A	219	5.737	-1.792	17.268	1.00	24.81	8	A	O
ATOM	1714	N	THR	A	220	0.957	-1.829	13.874	1.00	20.42	7	A	N
ATOM	1715	CA	THR	A	220	0.512	-2.854	12.933	1.00	20.53	6	A	C
ATOM	1716	C	THR	A	220	1.728	-3.592	12.432	1.00	18.64	6	A	C
ATOM	1717	O	THR	A	220	2.751	-2.949	12.110	1.00	17.61	8	A	O
ATOM	1718	CB	THR	A	220	-0.292	-2.222	11.773	1.00	21.00	6	A	C
ATOM	1719	OG1	THR	A	220	-1.440	-1.553	12.333	1.00	19.49	8	A	O
ATOM	1720	CG2	THR	A	220	-0.793	-3.218	10.746	1.00	20.45	6	A	C
ATOM	1721	N	VAL	A	221	1.673	-4.917	12.340	1.00	18.00	7	A	N
ATOM	1722	CA	VAL	A	221	2.822	-5.670	11.818	1.00	18.92	6	A	C
ATOM	1723	C	VAL	A	221	2.390	-6.544	10.646	1.00	20.17	6	A	C
ATOM	1724	O	VAL	A	221	1.290	-7.099	10.756	1.00	19.57	8	A	O
ATOM	1725	CB	VAL	A	221	3.482	-6.583	12.865	1.00	21.11	6	A	C
ATOM	1726	CG1	VAL	A	221	4.759	-7.218	12.322	1.00	23.79	6	A	C
ATOM	1727	CG2	VAL	A	221	3.871	-5.736	14.066	1.00	20.28	6	A	C
ATOM	1728	N	VAL	A	222	3.217	-6.568	9.584	1.00	18.82	7	A	N

23/188

ATOM	1729	CA	VAL	A	222	2.865	-7.368	8.424	1.00	21.12	6	A	C
ATOM	1730	C	VAL	A	222	3.983	-8.396	8.169	1.00	20.34	6	A	C
ATOM	1731	O	VAL	A	222	5.111	-7.954	8.126	1.00	19.15	8	A	O
ATOM	1732	CB	VAL	A	222	2.644	-6.609	7.111	1.00	22.15	6	A	C
ATOM	1733	CG1	VAL	A	222	2.116	-7.572	6.024	1.00	21.68	6	A	C
ATOM	1734	CG2	VAL	A	222	1.687	-5.439	7.250	1.00	21.14	6	A	C
ATOM	1735	N	GLY	A	223	3.623	-9.678	7.989	1.00	20.93	7	A	N
ATOM	1736	CA	GLY	A	223	4.647	-10.695	7.701	1.00	21.51	6	A	C
ATOM	1737	C	GLY	A	223	4.448	-11.359	6.318	1.00	21.50	6	A	C
ATOM	1738	O	GLY	A	223	3.344	-11.341	5.762	1.00	20.00	8	A	O
ATOM	1739	N	GLY	A	224	5.455	-12.137	5.915	1.00	19.80	7	A	N
ATOM	1740	CA	GLY	A	224	5.486	-12.839	4.633	1.00	20.08	6	A	C
ATOM	1741	C	GLY	A	224	5.514	-11.897	3.436	1.00	20.97	6	A	C
ATOM	1742	O	GLY	A	224	5.391	-12.286	2.268	1.00	19.90	8	A	O
ATOM	1743	N	VAL	A	225	5.994	-10.657	3.638	1.00	19.74	7	A	N
ATOM	1744	CA	VAL	A	225	6.070	-9.642	2.637	1.00	20.98	6	A	C
ATOM	1745	C	VAL	A	225	7.116	-9.898	1.547	1.00	22.27	6	A	C
ATOM	1746	O	VAL	A	225	8.308	-9.996	1.856	1.00	22.20	8	A	O
ATOM	1747	CB	VAL	A	225	6.427	-8.276	3.305	1.00	23.28	6	A	C
ATOM	1748	CG1	VAL	A	225	6.299	-7.142	2.318	1.00	22.43	6	A	C
ATOM	1749	CG2	VAL	A	225	5.597	-7.966	4.544	1.00	21.90	6	A	C
ATOM	1750	N	PRO	A	226	6.721	-9.819	0.278	1.00	20.19	7	A	N
ATOM	1751	CA	PRO	A	226	7.617	-9.978	-0.851	1.00	20.84	6	A	C
ATOM	1752	C	PRO	A	226	8.597	-8.825	-0.893	1.00	20.70	6	A	C
ATOM	1753	O	PRO	A	226	8.279	-7.729	-0.428	1.00	19.48	8	A	O
ATOM	1754	CB	PRO	A	226	6.718	-9.896	-2.087	1.00	20.91	6	A	C
ATOM	1755	CG	PRO	A	226	5.408	-10.423	-1.542	1.00	21.66	6	A	C
ATOM	1756	CD	PRO	A	226	5.315	-9.731	-0.180	1.00	21.40	6	A	C
ATOM	1757	N	VAL	A	227	9.738	-9.072	-1.510	1.00	19.91	7	A	N
ATOM	1758	CA	VAL	A	227	10.767	-8.027	-1.543	1.00	18.70	6	A	C
ATOM	1759	C	VAL	A	227	10.634	-7.109	-2.742	1.00	16.99	6	A	C
ATOM	1760	O	VAL	A	227	10.328	-7.578	-3.843	1.00	19.16	8	A	O
ATOM	1761	CB	VAL	A	227	12.119	-8.759	-1.558	1.00	18.33	6	A	C
ATOM	1762	CG1	VAL	A	227	13.310	-7.837	-1.805	1.00	15.62	6	A	C
ATOM	1763	CG2	VAL	A	227	12.234	-9.547	-0.234	1.00	14.94	6	A	C
ATOM	1764	N	GLY	A	228	10.915	-5.820	-2.536	1.00	16.93	7	A	N
ATOM	1765	CA	GLY	A	228	10.882	-4.993	-3.781	1.00	18.96	6	A	C
ATOM	1766	C	GLY	A	228	9.526	-4.363	-4.083	1.00	18.69	6	A	C
ATOM	1767	O	GLY	A	228	9.389	-3.831	-5.187	1.00	17.59	8	A	O
ATOM	1768	N	LEU	A	229	8.621	-4.335	-3.099	1.00	17.25	7	A	N
ATOM	1769	CA	LEU	A	229	7.359	-3.591	-3.255	1.00	17.11	6	A	C
ATOM	1770	C	LEU	A	229	7.638	-2.124	-2.954	1.00	14.74	6	A	C
ATOM	1771	O	LEU	A	229	8.253	-1.838	-1.921	1.00	16.18	8	A	O
ATOM	1772	CB	LEU	A	229	6.252	-4.116	-2.338	1.00	16.75	6	A	C
ATOM	1773	CG	LEU	A	229	5.670	-5.472	-2.771	1.00	20.05	6	A	C
ATOM	1774	CD1	LEU	A	229	5.175	-6.240	-1.553	1.00	18.56	6	A	C
ATOM	1775	CD2	LEU	A	229	4.581	-5.201	-3.827	1.00	18.37	6	A	C
ATOM	1776	N	GLY	A	230	7.132	-1.158	-3.720	1.00	16.63	7	A	N
ATOM	1777	CA	GLY	A	230	7.517	0.265	-3.528	1.00	13.89	6	A	C
ATOM	1778	C	GLY	A	230	8.771	0.555	-4.389	1.00	16.58	6	A	C
ATOM	1779	O	GLY	A	230	9.369	-0.377	-4.913	1.00	15.68	8	A	O
ATOM	1780	N	SER	A	231	9.192	1.803	-4.568	1.00	16.96	7	A	N
ATOM	1781	CA	SER	A	231	10.421	2.093	-5.318	1.00	17.21	6	A	C
ATOM	1782	C	SER	A	231	11.062	3.395	-4.817	1.00	18.22	6	A	C
ATOM	1783	O	SER	A	231	10.308	4.256	-4.368	1.00	17.47	8	A	O
ATOM	1784	CB	SER	A	231	10.170	2.308	-6.820	1.00	16.43	6	A	C
ATOM	1785	OG	SER	A	231	11.454	2.462	-7.450	1.00	15.35	8	A	O
ATOM	1786	N	TYR	A	232	12.362	3.590	-5.055	1.00	17.85	7	A	N
ATOM	1787	CA	TYR	A	232	13.062	4.813	-4.681	1.00	17.69	6	A	C
ATOM	1788	C	TYR	A	232	13.103	5.738	-5.885	1.00	17.22	6	A	C
ATOM	1789	O	TYR	A	232	13.472	6.901	-5.667	1.00	17.87	8	A	O
ATOM	1790	CB	TYR	A	232	14.537	4.487	-4.267	1.00	19.02	6	A	C
ATOM	1791	CG	TYR	A	232	15.225	3.620	-5.299	1.00	19.87	6	A	C
ATOM	1792	CD1	TYR	A	232	15.913	4.206	-6.326	1.00	18.08	6	A	C
ATOM	1793	CD2	TYR	A	232	15.178	2.222	-5.240	1.00	19.48	6	A	C
ATOM	1794	CE1	TYR	A	232	16.531	3.459	-7.283	1.00	19.90	6	A	C
ATOM	1795	CE2	TYR	A	232	15.789	1.463	-6.229	1.00	21.56	6	A	C
ATOM	1796	C2	TYR	A	232	16.460	2.078	-7.249	1.00	20.49	6	A	C
ATOM	1797	OH	TYR	A	232	17.112	1.386	-8.242	1.00	21.78	8	A	O
ATOM	1798	N	VAL	A	233	12.578	5.322	-7.051	1.00	15.62	7	A	N
ATOM	1799	CA	VAL	A	233	12.861	6.085	-8.263	1.00	17.84	6	A	C
ATOM	1800	C	VAL	A	233	12.138	7.424	-8.333	1.00	16.50	6	A	C
ATOM	1801	O	VAL	A	233	12.546	8.302	-9.098	1.00	16.53	8	A	O
ATOM	1802	CB	VAL	A	233	12.706	5.320	-9.568	1.00	16.80	6	A	C
ATOM	1803	CG1	VAL	A	233	13.758	4.190	-9.518	1.00	19.12	6	A	C
ATOM	1804	CG2	VAL	A	233	11.287	4.820	-9.804	1.00	16.49	6	A	C
ATOM	1805	N	GLN	A	234	11.108	7.551	-7.502	1.00	15.68	7	A	N
ATOM	1806	CA	GLN	A	234	10.399	8.844	-7.479	1.00	15.92	6	A	C
ATOM	1807	C	GLN	A	234	9.792	8.901	-6.090	1.00	17.25	6	A	C

24/188

ATOM	1808	O	GLN	A	234	9.323	7.832	-5.633	1.00	17.12	8	A	O
ATOM	1809	CB	GLN	A	234	9.363	8.957	-8.601	1.00	14.89	6	A	C
ATOM	1810	CG	GLN	A	234	8.853	10.366	-8.862	1.00	15.13	6	A	C
ATOM	1811	CD	GLN	A	234	9.843	11.310	-9.513	1.00	17.15	6	A	C
ATOM	1812	OE1	GLN	A	234	9.650	12.543	-9.556	1.00	16.97	8	A	O
ATOM	1813	NE2	GLN	A	234	10.940	10.737	-10.058	1.00	14.92	7	A	N
ATOM	1814	N	TRP	A	235	9.736	10.076	-5.481	1.00	16.58	7	A	N
ATOM	1815	CA	TRP	A	235	9.250	10.155	-4.098	1.00	17.78	6	A	C
ATOM	1816	C	TRP	A	235	7.884	9.487	-3.859	1.00	18.05	6	A	C
ATOM	1817	O	TRP	A	235	7.711	8.850	-2.808	1.00	14.57	8	A	O
ATOM	1818	CB	TRP	A	235	9.228	11.644	-3.661	1.00	16.92	6	A	C
ATOM	1819	CG	TRP	A	235	8.105	12.411	-4.300	1.00	20.91	6	A	C
ATOM	1820	CD1	TRP	A	235	8.135	12.985	-5.555	1.00	19.28	6	A	C
ATOM	1821	CD2	TRP	A	235	6.796	12.668	-3.771	1.00	20.31	6	A	C
ATOM	1822	NE1	TRP	A	235	6.928	13.571	-5.816	1.00	20.38	7	A	N
ATOM	1823	CE2	TRP	A	235	6.088	13.400	-4.746	1.00	21.40	6	A	C
ATOM	1824	CE3	TRP	A	235	6.146	12.333	-2.584	1.00	21.14	6	A	C
ATOM	1825	CZ2	TRP	A	235	4.754	13.817	-4.582	1.00	21.39	6	A	C
ATOM	1826	CZ3	TRP	A	235	4.828	12.726	-2.401	1.00	20.16	6	A	C
ATOM	1827	CH2	TRP	A	235	4.126	13.454	-3.417	1.00	20.12	6	A	C
ATOM	1828	N	ASP	A	236	6.938	9.686	-4.770	1.00	17.15	7	A	N
ATOM	1829	CA	ASP	A	236	5.556	9.213	-4.542	1.00	18.21	6	A	C
ATOM	1830	C	ASP	A	236	5.432	7.729	-4.799	1.00	20.18	6	A	C
ATOM	1831	O	ASP	A	236	4.322	7.195	-4.825	1.00	20.22	8	A	O
ATOM	1832	CB	ASP	A	236	4.539	10.002	-5.398	1.00	20.93	6	A	C
ATOM	1833	CG	ASP	A	236	4.880	10.070	-6.881	1.00	23.36	6	A	C
ATOM	1834	OD1	ASP	A	236	5.923	9.562	-7.336	1.00	22.68	8	A	O
ATOM	1835	OD2	ASP	A	236	4.146	10.662	-7.719	1.00	24.60	8	A	O
ATOM	1836	N	ARG	A	237	6.545	7.039	-5.104	1.00	17.72	7	A	N
ATOM	1837	CA	ARG	A	237	6.509	5.600	-5.328	1.00	17.12	6	A	C
ATOM	1838	C	ARG	A	237	6.952	4.831	-4.082	1.00	16.28	6	A	C
ATOM	1839	O	ARG	A	237	6.981	3.635	-4.163	1.00	17.84	8	A	O
ATOM	1840	CB	ARG	A	237	7.434	5.271	-6.531	1.00	16.45	6	A	C
ATOM	1841	CG	ARG	A	237	6.636	5.778	-7.778	1.00	20.40	6	A	C
ATOM	1842	CD	ARG	A	237	7.081	5.316	-9.111	1.00	22.78	6	A	C
ATOM	1843	NE	ARG	A	237	7.177	3.903	-9.306	1.00	24.77	7	A	N
ATOM	1844	CZ	ARG	A	237	7.886	3.225	-10.213	1.00	24.47	6	A	C
ATOM	1845	NH1	ARG	A	237	7.828	1.899	-10.129	1.00	24.89	7	A	N
ATOM	1846	NH2	ARG	A	237	8.585	3.824	-11.132	1.00	21.08	7	A	N
ATOM	1847	N	LYS	A	238	7.470	5.503	-3.073	1.00	16.66	7	A	N
ATOM	1848	CA	LYS	A	238	8.003	4.873	-1.856	1.00	17.06	6	A	C
ATOM	1849	C	LYS	A	238	6.795	4.331	-1.089	1.00	19.28	6	A	C
ATOM	1850	O	LYS	A	238	5.859	5.094	-0.814	1.00	15.98	8	A	O
ATOM	1851	CB	LYS	A	238	8.834	5.894	-1.070	1.00	16.54	6	A	C
ATOM	1852	CG	LYS	A	238	10.059	6.343	-1.872	1.00	18.04	6	A	C
ATOM	1853	CD	LYS	A	238	10.885	7.439	-1.227	1.00	19.42	6	A	C
ATOM	1854	CE	LYS	A	238	12.210	7.675	-1.956	1.00	19.93	6	A	C
ATOM	1855	NZ	LYS	A	238	13.003	8.738	-1.231	1.00	20.97	7	A	N
ATOM	1856	N	LEU	A	239	6.849	3.051	-0.705	1.00	18.98	7	A	N
ATOM	1857	CA	LEU	A	239	5.708	2.406	-0.031	1.00	18.32	6	A	C
ATOM	1858	C	LEU	A	239	5.585	2.813	1.425	1.00	18.78	6	A	C
ATOM	1859	O	LEU	A	239	4.466	2.890	1.933	1.00	17.73	8	A	O
ATOM	1860	CB	LEU	A	239	5.841	0.876	-0.217	1.00	18.00	6	A	C
ATOM	1861	CG	LEU	A	239	4.838	0.004	0.543	1.00	20.95	6	A	C
ATOM	1862	CD1	LEU	A	239	3.395	0.353	0.099	1.00	21.64	6	A	C
ATOM	1863	CD2	LEU	A	239	4.991	-1.493	0.329	1.00	17.41	6	A	C
ATOM	1864	N	ASP	A	240	6.735	3.131	2.073	1.00	15.10	7	A	N
ATOM	1865	CA	ASP	A	240	6.629	3.575	3.454	1.00	17.68	6	A	C
ATOM	1866	C	ASP	A	240	5.852	4.892	3.446	1.00	15.66	6	A	C
ATOM	1867	O	ASP	A	240	4.896	5.102	4.213	1.00	14.38	8	A	O
ATOM	1868	CB	ASP	A	240	7.969	3.619	4.197	1.00	16.45	6	A	C
ATOM	1869	CG	ASP	A	240	9.053	4.382	3.495	1.00	18.20	6	A	C
ATOM	1870	OD1	ASP	A	240	8.945	4.731	2.292	1.00	18.15	8	A	O
ATOM	1871	OD2	ASP	A	240	10.081	4.774	4.145	1.00	17.34	8	A	O
ATOM	1872	N	ALA	A	241	6.187	5.730	2.493	1.00	14.66	7	A	N
ATOM	1873	CA	ALA	A	241	5.493	7.028	2.397	1.00	17.30	6	A	C
ATOM	1874	C	ALA	A	241	4.011	6.853	2.018	1.00	17.56	6	A	C
ATOM	1875	O	ALA	A	241	3.211	7.668	2.522	1.00	17.69	8	A	O
ATOM	1876	CB	ALA	A	241	6.280	7.868	1.392	1.00	15.36	6	A	C
ATOM	1877	N	ARG	A	242	3.687	5.912	1.137	1.00	14.65	7	A	N
ATOM	1878	CA	ARG	A	242	2.270	5.663	0.832	1.00	18.86	6	A	C
ATOM	1879	C	ARG	A	242	1.532	5.201	2.090	1.00	17.00	6	A	C
ATOM	1880	O	ARG	A	242	0.417	5.681	2.275	1.00	15.60	8	A	O
ATOM	1881	CB	ARG	A	242	2.088	4.616	-0.299	1.00	19.10	6	A	C
ATOM	1882	CG	AARG	A	242	2.602	5.211	-1.612	0.50	16.19	6	A	C
ATOM	1883	CG	BARG	A	242	0.650	4.333	-0.689	0.50	21.30	6	A	C
ATOM	1884	CD	AARG	A	242	2.650	4.174	-2.732	0.50	16.95	6	A	C
ATOM	1885	CD	BARG	A	242	0.590	3.369	-1.854	0.50	24.06	6	A	C
ATOM	1886	NE	AARG	A	242	2.891	4.813	-4.027	0.50	15.86	7	A	N

25/188

ATOM	1887	NE BARG A 242	-0.530	3.591	-2.770	0.50	23.91	7	A	N
ATOM	1888	CZ AARG A 242	2.638	4.283	-5.208	0.50	17.24	6	A	C
ATOM	1889	CZ BARG A 242	-0.756	2.765	-3.789	0.50	25.12	6	A	C
ATOM	1890	NH2AARG A 242	2.108	3.058	-5.338	0.50	19.08	7	A	N
ATOM	1891	NH2BARG A 242	-1.710	2.977	-4.671	0.50	24.15	7	A	N
ATOM	1892	NH1AARG A 242	2.849	4.977	-6.314	0.50	14.33	7	A	N
ATOM	1893	NH1BARG A 242	0.042	1.706	-3.946	0.50	27.33	7	A	N
ATOM	1894	N LEU A 243	2.115	4.318	2.902	1.00	15.29	7	A	N
ATOM	1895	CA LEU A 243	1.551	3.887	4.164	1.00	17.46	6	A	C
ATOM	1896	C LEU A 243	1.420	5.048	5.149	1.00	16.35	6	A	C
ATOM	1897	O LEU A 243	0.408	5.165	5.854	1.00	16.27	8	A	O
ATOM	1898	CB LEU A 243	2.359	2.783	4.867	1.00	15.54	6	A	C
ATOM	1899	CG LEU A 243	2.273	1.418	4.138	1.00	16.64	6	A	C
ATOM	1900	CD1 LEU A 243	3.384	0.564	4.743	1.00	20.26	6	A	C
ATOM	1901	CD2 LEU A 243	0.945	0.740	4.519	1.00	12.71	6	A	C
ATOM	1902	N ALA A 244	2.345	5.972	5.141	1.00	14.59	7	A	N
ATOM	1903	CA ALA A 244	2.281	7.131	6.046	1.00	17.06	6	A	C
ATOM	1904	C ALA A 244	0.998	7.938	5.836	1.00	17.17	6	A	C
ATOM	1905	O ALA A 244	0.318	8.303	6.821	1.00	17.50	8	A	O
ATOM	1906	CB ALA A 244	3.517	8.031	5.966	1.00	13.10	6	A	C
ATOM	1907	N GLN A 245	0.691	8.280	4.606	1.00	16.27	7	A	N
ATOM	1908	CA GLN A 245	-0.543	9.003	4.292	1.00	17.56	6	A	C
ATOM	1909	C GLN A 245	-1.779	8.211	4.782	1.00	17.39	6	A	C
ATOM	1910	O GLN A 245	-2.646	8.798	5.448	1.00	17.39	8	A	O
ATOM	1911	CB GLN A 245	-0.698	9.218	2.785	1.00	17.29	6	A	C
ATOM	1912	CG GLN A 245	-2.055	9.843	2.396	1.00	21.10	6	A	C
ATOM	1913	CD GLN A 245	-2.298	9.832	0.883	1.00	24.17	6	A	C
ATOM	1914	OE1 GLN A 245	-1.965	8.934	0.099	1.00	22.39	8	A	O
ATOM	1915	NE2 GLN A 245	-3.009	10.853	0.443	1.00	23.69	7	A	N
ATOM	1916	N ALA A 246	-1.831	6.911	4.465	1.00	16.34	7	A	N
ATOM	1917	CA ALA A 246	-2.976	6.099	4.884	1.00	18.50	6	A	C
ATOM	1918	C ALA A 246	-3.153	6.133	6.413	1.00	19.13	6	A	C
ATOM	1919	O ALA A 246	-4.260	6.346	6.936	1.00	19.19	8	A	O
ATOM	1920	CB ALA A 246	-2.771	4.671	4.378	1.00	18.18	6	A	C
ATOM	1921	N VAL A 247	-2.085	5.860	7.138	1.00	15.88	7	A	N
ATOM	1922	CA VAL A 247	-2.157	5.901	8.609	1.00	17.65	6	A	C
ATOM	1923	C VAL A 247	-2.567	7.262	9.140	1.00	17.80	6	A	C
ATOM	1924	O VAL A 247	-3.509	7.346	9.963	1.00	18.79	8	A	O
ATOM	1925	CB VAL A 247	-0.813	5.423	9.219	1.00	15.91	6	A	C
ATOM	1926	CG1 VAL A 247	-0.811	5.587	10.741	1.00	14.86	6	A	C
ATOM	1927	CG2 VAL A 247	-0.629	3.938	8.821	1.00	15.94	6	A	C
ATOM	1928	N VAL A 248	-1.915	8.366	8.740	1.00	16.76	7	A	N
ATOM	1929	CA VAL A 248	-2.316	9.670	9.281	1.00	15.43	6	A	C
ATOM	1930	C VAL A 248	-3.706	10.074	8.786	1.00	16.88	6	A	C
ATOM	1931	O VAL A 248	-4.313	10.887	9.480	1.00	15.90	8	A	O
ATOM	1932	CB VAL A 248	-1.255	10.735	8.910	1.00	16.64	6	A	C
ATOM	1933	CG1 VAL A 248	-1.695	12.144	9.233	1.00	14.71	6	A	C
ATOM	1934	CG2 VAL A 248	0.009	10.364	9.675	1.00	14.52	6	A	C
ATOM	1935	N SER A 249	-4.295	9.380	7.802	1.00	14.98	7	A	N
ATOM	1936	CA SER A 249	-5.630	9.756	7.361	1.00	16.78	6	A	C
ATOM	1937	C SER A 249	-6.708	9.252	8.328	1.00	16.66	6	A	C
ATOM	1938	O SER A 249	-7.879	9.582	8.131	1.00	17.66	8	A	O
ATOM	1939	CB SER A 249	-5.949	9.316	5.937	1.00	17.26	6	A	C
ATOM	1940	OG SER A 249	-6.206	7.916	5.812	1.00	19.32	8	A	O
ATOM	1941	N ILE A 250	-6.365	8.354	9.223	1.00	15.53	7	A	N
ATOM	1942	CA ILE A 250	-7.384	7.825	10.162	1.00	15.67	6	A	C
ATOM	1943	C ILE A 250	-7.718	8.943	11.138	1.00	17.81	6	A	C
ATOM	1944	O ILE A 250	-6.852	9.699	11.625	1.00	14.26	8	A	O
ATOM	1945	CB ILE A 250	-6.891	6.564	10.841	1.00	15.93	6	A	C
ATOM	1946	CG1 ILE A 250	-6.408	5.542	9.771	1.00	13.50	6	A	C
ATOM	1947	CG2 ILE A 250	-7.948	5.848	11.722	1.00	17.08	6	A	C
ATOM	1948	CD1 ILE A 250	-5.699	4.363	10.443	1.00	15.52	6	A	C
ATOM	1949	N ASN A 251	-9.031	9.108	11.375	1.00	16.69	7	A	N
ATOM	1950	CA ASN A 251	-9.508	10.099	12.336	1.00	17.04	6	A	C
ATOM	1951	C ASN A 251	-8.709	10.034	13.630	1.00	18.75	6	A	C
ATOM	1952	O ASN A 251	-8.469	8.936	14.138	1.00	16.78	8	A	O
ATOM	1953	CB ASN A 251	-10.979	9.699	12.736	1.00	17.04	6	A	C
ATOM	1954	CG ASN A 251	-11.934	9.926	11.593	1.00	19.46	6	A	C
ATOM	1955	OD1 ASN A 251	-11.651	9.411	10.500	1.00	19.48	8	A	O
ATOM	1956	ND2 ASN A 251	-13.051	10.620	11.733	1.00	19.11	7	A	N
ATOM	1957	N ALA A 252	-8.242	11.168	14.138	1.00	18.33	7	A	N
ATOM	1958	CA ALA A 252	-7.572	11.311	15.397	1.00	19.66	6	A	C
ATOM	1959	C ALA A 252	-6.115	10.918	15.299	1.00	18.95	6	A	C
ATOM	1960	O ALA A 252	-5.414	11.142	16.288	1.00	20.15	8	A	O
ATOM	1961	CB ALA A 252	-8.227	10.612	16.600	1.00	19.24	6	A	C
ATOM	1962	N PHE A 253	-5.646	10.386	14.169	1.00	19.74	7	A	N
ATOM	1963	CA PHE A 253	-4.216	10.041	14.127	1.00	20.24	6	A	C
ATOM	1964	C PHE A 253	-3.346	11.271	13.890	1.00	20.49	6	A	C
ATOM	1965	O PHE A 253	-3.608	12.027	12.999	1.00	20.42	8	A	O

26/188

ATOM	1966	CB	PHE	A	253	-3.829	8.938	13.124	1.00	18.51	6	A	C
ATOM	1967	CG	PHE	A	253	-4.136	7.546	13.651	1.00	19.18	6	A	C
ATOM	1968	CD1	PHE	A	253	-5.433	7.227	14.049	1.00	18.10	6	A	C
ATOM	1969	CD2	PHE	A	253	-3.161	6.569	13.778	1.00	17.65	6	A	C
ATOM	1970	CE1	PHE	A	253	-5.751	5.952	14.510	1.00	17.22	6	A	C
ATOM	1971	CE2	PHE	A	253	-3.458	5.295	14.215	1.00	16.98	6	A	C
ATOM	1972	CZ	PHE	A	253	-4.795	4.974	14.608	1.00	17.88	6	A	C
ATOM	1973	N	LYS	A	254	-2.218	11.420	14.620	1.00	19.89	7	A	N
ATOM	1974	CA	LYS	A	254	-1.416	12.609	14.467	1.00	18.57	6	A	C
ATOM	1975	C	LYS	A	254	0.030	12.259	14.140	1.00	16.78	6	A	C
ATOM	1976	O	LYS	A	254	0.814	13.145	14.366	1.00	15.12	8	A	O
ATOM	1977	CB	LYS	A	254	-1.463	13.460	15.753	1.00	17.45	6	A	C
ATOM	1978	CG	LYS	A	254	-2.891	13.755	16.202	1.00	20.23	6	A	C
ATOM	1979	CD	LYS	A	254	-3.547	14.804	15.339	1.00	18.88	6	A	C
ATOM	1980	CE	LYS	A	254	-2.841	16.140	15.446	1.00	17.17	6	A	C
ATOM	1981	NZ	LYS	A	254	-3.410	17.138	14.493	1.00	17.75	7	A	N
ATOM	1982	N	GLY	A	255	0.383	11.024	13.813	1.00	13.67	7	A	N
ATOM	1983	CA	GLY	A	255	1.747	10.692	13.506	1.00	14.42	6	A	C
ATOM	1984	C	GLY	A	255	1.881	9.219	13.075	1.00	15.77	6	A	C
ATOM	1985	O	GLY	A	255	0.926	8.457	13.295	1.00	15.88	8	A	O
ATOM	1986	N	VAL	A	256	3.015	8.889	12.482	1.00	13.89	7	A	N
ATOM	1987	CA	VAL	A	256	3.240	7.515	12.007	1.00	15.68	6	A	C
ATOM	1988	C	VAL	A	256	4.754	7.327	11.961	1.00	17.44	6	A	C
ATOM	1989	O	VAL	A	256	5.487	8.337	11.711	1.00	16.93	8	A	O
ATOM	1990	CB	VAL	A	256	2.581	7.269	10.625	1.00	15.71	6	A	C
ATOM	1991	CG1	VAL	A	256	3.188	8.241	9.597	1.00	15.59	6	A	C
ATOM	1992	CG2	VAL	A	256	2.722	5.812	10.192	1.00	15.79	6	A	C
ATOM	1993	N	GLU	A	257	5.222	6.138	12.300	1.00	14.23	7	A	N
ATOM	1994	CA	GLU	A	257	6.682	5.926	12.336	1.00	17.69	6	A	C
ATOM	1995	C	GLU	A	257	6.957	4.487	11.962	1.00	16.38	6	A	C
ATOM	1996	O	GLU	A	257	6.018	3.706	12.109	1.00	15.26	8	A	O
ATOM	1997	CB	GLU	A	257	7.155	6.385	13.732	1.00	18.71	6	A	C
ATOM	1998	CG	GLU	A	257	6.923	5.335	14.810	1.00	19.38	6	A	C
ATOM	1999	CD	GLU	A	257	7.551	5.744	16.157	1.00	21.45	6	A	C
ATOM	2000	OE1	GLU	A	257	8.351	6.684	16.316	1.00	21.20	8	A	O
ATOM	2001	OE2	GLU	A	257	7.127	5.086	17.118	1.00	21.74	8	A	O
ATOM	2002	N	PHE	A	258	8.137	4.191	11.457	1.00	17.55	7	A	N
ATOM	2003	CA	PHE	A	258	8.444	2.827	10.992	1.00	19.14	6	A	C
ATOM	2004	C	PHE	A	258	9.649	2.234	11.691	1.00	17.98	6	A	C
ATOM	2005	O	PHE	A	258	10.686	2.897	11.720	1.00	19.20	8	A	O
ATOM	2006	CB	PHE	A	258	8.726	2.906	9.492	1.00	19.10	6	A	C
ATOM	2007	CG	PHE	A	258	7.536	3.342	8.680	1.00	21.90	6	A	C
ATOM	2008	CD1	PHE	A	258	7.225	4.675	8.515	1.00	22.54	6	A	C
ATOM	2009	CD2	PHE	A	258	6.668	2.387	8.173	1.00	23.84	6	A	C
ATOM	2010	CE1	PHE	A	258	6.094	5.045	7.820	1.00	24.45	6	A	C
ATOM	2011	CE2	PHE	A	258	5.529	2.753	7.451	1.00	22.46	6	A	C
ATOM	2012	CZ	PHE	A	258	5.248	4.091	7.292	1.00	23.62	6	A	C
ATOM	2013	N	GLY	A	259	9.547	0.967	12.111	1.00	20.10	7	A	N
ATOM	2014	CA	GLY	A	259	10.704	0.362	12.793	1.00	19.62	6	A	C
ATOM	2015	C	GLY	A	259	10.977	1.115	14.094	1.00	21.48	6	A	C
ATOM	2016	O	GLY	A	259	10.055	1.444	14.835	1.00	20.94	8	A	O
ATOM	2017	N	LEU	A	260	12.208	1.459	14.345	1.00	21.79	7	A	N
ATOM	2018	CA	LEU	A	260	12.527	2.250	15.555	1.00	23.69	6	A	C
ATOM	2019	C	LEU	A	260	11.834	3.601	15.538	1.00	22.81	6	A	C
ATOM	2020	O	LEU	A	260	11.662	4.228	16.572	1.00	22.62	8	A	O
ATOM	2021	CB	LEU	A	260	14.015	2.564	15.587	1.00	22.44	6	A	C
ATOM	2022	CG	LEU	A	260	14.950	1.464	16.056	1.00	24.61	6	A	C
ATOM	2023	CD1	LEU	A	260	16.396	1.902	15.812	1.00	24.04	6	A	C
ATOM	2024	CD2	LEU	A	260	14.779	1.204	17.553	1.00	24.34	6	A	C
ATOM	2025	N	GLY	A	261	11.469	4.065	14.347	1.00	23.27	7	A	N
ATOM	2026	CA	GLY	A	261	10.752	5.323	14.229	1.00	22.68	6	A	C
ATOM	2027	C	GLY	A	261	11.482	6.559	14.739	1.00	20.97	6	A	C
ATOM	2028	O	GLY	A	261	12.641	6.744	14.398	1.00	20.56	8	A	O
ATOM	2029	N	PHE	A	262	10.801	7.415	15.514	1.00	18.77	7	A	N
ATOM	2030	CA	PHE	A	262	11.469	8.641	15.990	1.00	21.97	6	A	C
ATOM	2031	C	PHE	A	262	12.697	8.327	16.877	1.00	21.86	6	A	C
ATOM	2032	O	PHE	A	262	13.695	9.091	16.857	1.00	21.03	8	A	O
ATOM	2033	CB	PHE	A	262	10.500	9.535	16.752	1.00	20.32	6	A	C
ATOM	2034	CG	PHE	A	262	9.670	10.401	15.827	1.00	20.66	6	A	C
ATOM	2035	CD1	PHE	A	262	10.084	11.697	15.571	1.00	19.34	6	A	C
ATOM	2036	CD2	PHE	A	262	8.530	9.902	15.228	1.00	16.69	6	A	C
ATOM	2037	CE1	PHE	A	262	9.350	12.469	14.673	1.00	18.97	6	A	C
ATOM	2038	CE2	PHE	A	262	7.830	10.696	14.314	1.00	19.95	6	A	C
ATOM	2039	CZ	PHE	A	262	8.245	11.972	14.029	1.00	16.92	6	A	C
ATOM	2040	N	GLU	A	263	12.731	7.124	17.441	1.00	20.67	7	A	N
ATOM	2041	CA	GLU	A	263	13.919	6.771	18.250	1.00	23.88	6	A	C
ATOM	2042	C	GLU	A	263	15.171	6.681	17.367	1.00	22.50	6	A	C
ATOM	2043	O	GLU	A	263	16.294	6.882	17.854	1.00	21.00	8	A	O
ATOM	2044	CB	GLU	A	263	13.711	5.458	18.985	1.00	27.42	6	A	C

27/188

ATOM	2045	CG	GLU	A	263	14.975	4.867	19.594	1.00	33.71	6	A	C
ATOM	2046	CD	GLU	A	263	14.690	3.760	20.587	1.00	38.88	6	A	C
ATOM	2047	OE1	GLU	A	263	13.510	3.629	20.999	1.00	41.12	8	A	O
ATOM	2048	OE2	GLU	A	263	15.632	3.026	20.986	1.00	42.42	8	A	O
ATOM	2049	N	ALA	A	264	14.998	6.408	16.072	1.00	18.24	7	A	N
ATOM	2050	CA	ALA	A	264	16.179	6.401	15.192	1.00	21.02	6	A	C
ATOM	2051	C	ALA	A	264	16.862	7.766	15.224	1.00	22.51	6	A	C
ATOM	2052	O	ALA	A	264	18.044	7.823	14.862	1.00	26.14	8	A	O
ATOM	2053	CB	ALA	A	264	15.791	6.097	13.730	1.00	21.47	6	A	C
ATOM	2054	N	GLY	A	265	16.190	8.879	15.541	1.00	21.40	7	A	N
ATOM	2055	CA	GLY	A	265	16.929	10.162	15.519	1.00	21.38	6	A	C
ATOM	2056	C	GLY	A	265	17.817	10.332	16.763	1.00	23.05	6	A	C
ATOM	2057	O	GLY	A	265	18.362	11.417	17.047	1.00	23.49	8	A	O
ATOM	2058	N	TYR	A	266	17.760	9.348	17.657	1.00	22.16	7	A	N
ATOM	2059	CA	TYR	A	266	18.514	9.491	18.920	1.00	23.49	6	A	C
ATOM	2060	C	TYR	A	266	19.689	8.533	18.900	1.00	26.08	6	A	C
ATOM	2061	O	TYR	A	266	20.359	8.409	19.928	1.00	22.39	8	A	O
ATOM	2062	CB	TYR	A	266	17.568	9.204	20.103	1.00	21.49	6	A	C
ATOM	2063	CG	TYR	A	266	16.506	10.241	20.370	1.00	22.92	6	A	C
ATOM	2064	CD1	TYR	A	266	15.406	10.391	19.537	1.00	21.93	6	A	C
ATOM	2065	CD2	TYR	A	266	16.581	11.075	21.472	1.00	22.00	6	A	C
ATOM	2066	CE1	TYR	A	266	14.423	11.322	19.771	1.00	22.12	6	A	C
ATOM	2067	CE2	TYR	A	266	15.624	12.035	21.696	1.00	23.77	6	A	C
ATOM	2068	CZ	TYR	A	266	14.542	12.160	20.834	1.00	24.07	6	A	C
ATOM	2069	OH	TYR	A	266	13.601	13.128	21.108	1.00	24.96	8	A	O
ATOM	2070	N	ARG	A	267	19.926	7.791	17.784	1.00	25.63	7	A	N
ATOM	2071	CA	ARG	A	267	20.907	6.722	17.850	1.00	27.65	6	A	C
ATOM	2072	C	ARG	A	267	21.996	6.892	16.803	1.00	26.16	6	A	C
ATOM	2073	O	ARG	A	267	21.893	7.832	16.044	1.00	24.21	8	A	O
ATOM	2074	CB	ARG	A	267	20.284	5.338	17.641	1.00	30.23	6	A	C
ATOM	2075	CG	ARG	A	267	19.523	4.758	18.837	1.00	34.22	6	A	C
ATOM	2076	CD	ARG	A	267	19.177	3.304	18.481	1.00	37.72	6	A	C
ATOM	2077	NE	ARG	A	267	18.264	2.676	19.430	1.00	42.53	7	A	N
ATOM	2078	CZ	ARG	A	267	17.981	1.376	19.479	1.00	43.07	6	A	C
ATOM	2079	NH1	ARG	A	267	18.562	0.549	18.617	1.00	44.24	7	A	N
ATOM	2080	NH2	ARG	A	267	17.139	0.920	20.391	1.00	43.11	7	A	N
ATOM	2081	N	LYS	A	268	22.957	5.990	16.735	1.00	22.40	7	A	N
ATOM	2082	CA	LYS	A	268	23.998	6.153	15.726	1.00	23.21	6	A	C
ATOM	2083	C	LYS	A	268	23.738	5.151	14.617	1.00	23.82	6	A	C
ATOM	2084	O	LYS	A	268	23.011	4.189	14.914	1.00	22.60	8	A	O
ATOM	2085	CB	LYS	A	268	25.398	5.877	16.300	1.00	26.43	6	A	C
ATOM	2086	CG	LYS	A	268	25.834	6.883	17.342	1.00	28.80	6	A	C
ATOM	2087	CD	LYS	A	268	26.321	6.281	18.626	1.00	34.85	6	A	C
ATOM	2088	CE	LYS	A	268	27.464	5.310	18.547	1.00	35.68	6	A	C
ATOM	2089	NZ	LYS	A	268	28.288	5.309	19.793	1.00	38.46	7	A	N
ATOM	2090	N	GLY	A	269	24.332	5.407	13.458	1.00	22.87	7	A	N
ATOM	2091	CA	GLY	A	269	24.157	4.514	12.315	1.00	23.37	6	A	C
ATOM	2092	C	GLY	A	269	24.510	3.060	12.607	1.00	24.93	6	A	C
ATOM	2093	O	GLY	A	269	23.828	2.088	12.231	1.00	22.21	8	A	O
ATOM	2094	N	SER	A	270	25.578	2.866	13.395	1.00	25.98	7	A	N
ATOM	2095	CA	SER	A	270	25.982	1.511	13.781	1.00	25.50	6	A	C
ATOM	2096	C	SER	A	270	24.923	0.834	14.634	1.00	26.37	6	A	C
ATOM	2097	O	SER	A	270	24.838	-0.409	14.683	1.00	26.73	8	A	O
ATOM	2098	CB	SER	A	270	27.329	1.582	14.534	1.00	26.95	6	A	C
ATOM	2099	OG	SER	A	270	27.301	2.518	15.585	1.00	25.31	8	A	O
ATOM	2100	N	GLN	A	271	24.074	1.601	15.315	1.00	26.27	7	A	N
ATOM	2101	CA	GLN	A	271	23.044	1.006	16.155	1.00	28.26	6	A	C
ATOM	2102	C	GLN	A	271	21.685	0.900	15.450	1.00	28.70	6	A	C
ATOM	2103	O	GLN	A	271	20.696	0.441	16.022	1.00	28.42	8	A	O
ATOM	2104	CB	GLN	A	271	22.869	1.883	17.404	1.00	29.54	6	A	C
ATOM	2105	CG	GLN	A	271	24.112	2.104	18.246	1.00	32.15	6	A	C
ATOM	2106	CD	GLN	A	271	23.957	3.215	19.262	1.00	35.47	6	A	C
ATOM	2107	OE1	GLN	A	271	23.584	4.373	19.038	1.00	35.89	8	A	O
ATOM	2108	NE2	GLN	A	271	24.207	2.898	20.529	1.00	36.70	7	A	N
ATOM	2109	N	VAL	A	272	21.621	1.338	14.206	1.00	27.14	7	A	N
ATOM	2110	CA	VAL	A	272	20.345	1.387	13.490	1.00	23.41	6	A	C
ATOM	2111	C	VAL	A	272	20.317	0.540	12.237	1.00	24.05	6	A	C
ATOM	2112	O	VAL	A	272	19.285	-0.109	12.008	1.00	21.88	8	A	O
ATOM	2113	CB	VAL	A	272	20.051	2.858	13.129	1.00	21.22	6	A	C
ATOM	2114	CG1	VAL	A	272	18.902	2.942	12.131	1.00	23.88	6	A	C
ATOM	2115	CG2	VAL	A	272	19.771	3.706	14.379	1.00	21.78	6	A	C
ATOM	2116	N	MET	A	273	21.346	0.583	11.357	1.00	22.48	7	A	N
ATOM	2117	CA	MET	A	273	21.223	-0.216	10.140	1.00	22.35	6	A	C
ATOM	2118	C	MET	A	273	21.042	-1.694	10.476	1.00	23.96	6	A	C
ATOM	2119	O	MET	A	273	21.555	-2.218	11.464	1.00	22.85	8	A	O
ATOM	2120	CB	MET	A	273	22.439	-0.053	9.199	1.00	22.09	6	A	C
ATOM	2121	CG	MET	A	273	22.958	1.379	9.273	1.00	21.60	6	A	C
ATOM	2122	SE	MET	A	273	21.192	2.511	8.497	1.00	39.66	34	A	SE
ATOM	2123	CE2	MET	A	273	21.523	4.185	9.604	1.00	15.58	6	A	C

28/188

ATOM	2124	N	ASP A 274	20.278	-2.362	9.613	1.00	23.15	7	A	N
ATOM	2125	CA	ASP A 274	20.053	-3.795	9.781	1.00	23.82	6	A	C
ATOM	2126	C	ASP A 274	21.020	-4.568	8.896	1.00	22.30	6	A	C
ATOM	2127	O	ASP A 274	20.912	-4.575	7.671	1.00	20.02	8	A	O
ATOM	2128	CB	ASP A 274	18.601	-4.095	9.381	1.00	22.46	6	A	C
ATOM	2129	CG	ASP A 274	17.596	-3.514	10.357	1.00	23.05	6	A	C
ATOM	2130	OD1	ASP A 274	17.827	-3.578	11.590	1.00	21.21	8	A	O
ATOM	2131	OD2	ASP A 274	16.560	-3.032	9.849	1.00	22.05	8	A	O
ATOM	2132	N	GLU A 275	21.992	-5.280	9.439	1.00	23.04	7	A	N
ATOM	2133	CA	GLU A 275	23.018	-6.000	8.702	1.00	22.75	6	A	C
ATOM	2134	C	GLU A 275	22.408	-7.118	7.870	1.00	23.01	6	A	C
ATOM	2135	O	GLU A 275	21.426	-7.757	8.219	1.00	22.85	8	A	O
ATOM	2136	CB	GLU A 275	24.109	-6.564	9.642	1.00	26.22	6	A	C
ATOM	2137	CG	GLU A 275	24.774	-5.495	10.525	1.00	27.82	6	A	C
ATOM	2138	CD	GLU A 275	25.998	-6.131	11.216	1.00	31.12	6	A	C
ATOM	2139	OE1	GLU A 275	25.774	-7.140	11.917	1.00	31.06	8	A	O
ATOM	2140	OE2	GLU A 275	27.132	-5.659	11.020	1.00	30.41	8	A	O
ATOM	2141	N	ILE A 276	22.989	-7.298	6.697	1.00	20.72	7	A	N
ATOM	2142	CA	ILE A 276	22.531	-8.182	5.658	1.00	21.85	6	A	C
ATOM	2143	C	ILE A 276	23.205	-9.546	5.735	1.00	22.02	6	A	C
ATOM	2144	O	ILE A 276	24.427	-9.537	5.857	1.00	21.94	8	A	O
ATOM	2145	CB	ILE A 276	22.878	-7.553	4.294	1.00	20.39	6	A	C
ATOM	2146	CG1	ILE A 276	22.032	-6.277	4.108	1.00	20.43	6	A	C
ATOM	2147	CG2	ILE A 276	22.612	-8.552	3.171	1.00	21.05	6	A	C
ATOM	2148	CD1	ILE A 276	22.437	-5.406	2.930	1.00	19.80	6	A	C
ATOM	2149	N	LEU A 277	22.393	-10.582	5.747	1.00	23.36	7	A	N
ATOM	2150	CA	LEU A 277	22.922	-11.936	5.896	1.00	24.19	6	A	C
ATOM	2151	C	LEU A 277	22.379	-12.788	4.781	1.00	25.32	6	A	C
ATOM	2152	O	LEU A 277	21.333	-12.459	4.171	1.00	26.18	8	A	O
ATOM	2153	CB	LEU A 277	22.446	-12.553	7.254	1.00	24.45	6	A	C
ATOM	2154	CG	LEU A 277	22.786	-11.728	8.499	1.00	27.37	6	A	C
ATOM	2155	CD1	LEU A 277	21.974	-12.258	9.701	1.00	26.39	6	A	C
ATOM	2156	CD2	LEU A 277	24.272	-11.790	8.812	1.00	24.86	6	A	C
ATOM	2157	N	TRP A 278	23.065	-13.892	4.519	1.00	24.11	7	A	N
ATOM	2158	CA	TRP A 278	22.647	-14.824	3.476	1.00	26.06	6	A	C
ATOM	2159	C	TRP A 278	22.933	-16.247	3.993	1.00	30.25	6	A	C
ATOM	2160	O	TRP A 278	23.967	-16.430	4.634	1.00	27.41	8	A	O
ATOM	2161	CB	TRP A 278	23.388	-14.591	2.166	1.00	25.15	6	A	C
ATOM	2162	CG	TRP A 278	22.966	-15.500	1.053	1.00	26.17	6	A	C
ATOM	2163	CD1	TRP A 278	22.025	-15.268	0.099	1.00	25.64	6	A	C
ATOM	2164	CD2	TRP A 278	23.453	-16.827	0.810	1.00	26.77	6	A	C
ATOM	2165	NE1	TRP A 278	21.885	-16.367	-0.708	1.00	25.62	7	A	N
ATOM	2166	CE2	TRP A 278	22.759	-17.327	-0.301	1.00	26.85	6	A	C
ATOM	2167	CE3	TRP A 278	24.414	-17.626	1.460	1.00	27.45	6	A	C
ATOM	2168	CZ2	TRP A 278	23.010	-18.604	-0.823	1.00	29.20	6	A	C
ATOM	2169	CZ3	TRP A 278	24.640	-18.888	0.938	1.00	28.97	6	A	C
ATOM	2170	CH2	TRP A 278	23.955	-19.360	-0.180	1.00	28.35	6	A	C
ATOM	2171	N	SER A 279	22.042	-17.163	3.635	1.00	32.64	7	A	N
ATOM	2172	CA	SER A 279	22.236	-18.565	3.944	1.00	36.46	6	A	C
ATOM	2173	C	SER A 279	21.703	-19.358	2.756	1.00	38.10	6	A	C
ATOM	2174	O	SER A 279	20.872	-18.836	1.984	1.00	36.78	8	A	O
ATOM	2175	CB	SER A 279	21.560	-18.940	5.251	1.00	36.06	6	A	C
ATOM	2176	OG	SER A 279	20.170	-19.088	5.113	1.00	36.18	8	A	O
ATOM	2177	N	LYS A 280	22.272	-20.538	2.537	1.00	40.11	7	A	N
ATOM	2178	CA	LYS A 280	21.788	-21.314	1.385	1.00	44.42	6	A	C
ATOM	2179	C	LYS A 280	20.375	-21.791	1.696	1.00	45.71	6	A	C
ATOM	2180	O	LYS A 280	19.562	-21.964	0.797	1.00	47.14	8	A	O
ATOM	2181	CB	LYS A 280	22.663	-22.501	1.050	1.00	46.35	6	A	C
ATOM	2182	CG	LYS A 280	22.760	-23.534	2.149	1.00	49.32	6	A	C
ATOM	2183	CD	LYS A 280	23.765	-24.610	1.737	1.00	51.63	6	A	C
ATOM	2184	CE	LYS A 280	24.622	-24.963	2.955	1.00	52.08	6	A	C
ATOM	2185	NZ	LYS A 280	23.743	-25.571	4.002	1.00	52.85	7	A	N
ATOM	2186	N	GLU A 281	20.138	-21.954	2.994	1.00	46.43	7	A	N
ATOM	2187	CA	GLU A 281	18.801	-22.385	3.389	1.00	49.87	6	A	C
ATOM	2188	C	GLU A 281	17.776	-21.321	2.984	1.00	49.18	6	A	C
ATOM	2189	O	GLU A 281	16.977	-21.582	2.098	1.00	50.20	8	A	O
ATOM	2190	CB	GLU A 281	18.747	-22.672	4.885	1.00	51.93	6	A	C
ATOM	2191	CG	GLU A 281	19.600	-23.834	5.342	1.00	54.01	6	A	C
ATOM	2192	CD	GLU A 281	21.088	-23.564	5.426	1.00	54.91	6	A	C
ATOM	2193	OE1	GLU A 281	21.515	-22.396	5.545	1.00	54.78	8	A	O
ATOM	2194	OE2	GLU A 281	21.844	-24.560	5.365	1.00	55.81	8	A	O
ATOM	2195	N	ASP A 282	17.837	-20.128	3.540	1.00	46.60	7	A	N
ATOM	2196	CA	ASP A 282	16.871	-19.077	3.406	1.00	44.56	6	A	C
ATOM	2197	C	ASP A 282	17.151	-17.918	2.449	1.00	39.72	6	A	C
ATOM	2198	O	ASP A 282	16.285	-17.031	2.352	1.00	38.10	8	A	O
ATOM	2199	CB	ASP A 282	16.790	-18.415	4.816	1.00	46.83	6	A	C
ATOM	2200	CG	ASP A 282	16.229	-19.363	5.864	1.00	49.61	6	A	C
ATOM	2201	OD1	ASP A 282	15.497	-20.308	5.477	1.00	50.46	8	A	O
ATOM	2202	OD2	ASP A 282	16.548	-19.211	7.066	1.00	50.55	8	A	O

29/188

ATOM	2203	N	GLY A 283	18.320	-17.864	1.833	1.00	33.09	7	A	N
ATOM	2204	CA	GLY A 283	18.659	-16.731	0.970	1.00	30.43	6	A	C
ATOM	2205	C	GLY A 283	18.946	-15.462	1.793	1.00	28.31	6	A	C
ATOM	2206	O	GLY A 283	19.533	-15.528	2.884	1.00	25.99	8	A	O
ATOM	2207	N	TYR A 284	18.584	-14.286	1.302	1.00	26.64	7	A	N
ATOM	2208	CA	TYR A 284	18.922	-13.050	1.981	1.00	23.71	6	A	C
ATOM	2209	C	TYR A 284	17.992	-12.763	3.152	1.00	25.38	6	A	C
ATOM	2210	O	TYR A 284	16.800	-12.935	2.986	1.00	21.82	8	A	O
ATOM	2211	CB	TYR A 284	18.936	-11.807	1.084	1.00	24.96	6	A	C
ATOM	2212	CG	TYR A 284	20.163	-11.816	0.177	1.00	24.81	6	A	C
ATOM	2213	CD1	TYR A 284	20.079	-12.312	-1.100	1.00	24.64	6	A	C
ATOM	2214	CD2	TYR A 284	21.371	-11.339	0.642	1.00	24.34	6	A	C
ATOM	2215	CE1	TYR A 284	21.193	-12.360	-1.927	1.00	24.71	6	A	C
ATOM	2216	CE2	TYR A 284	22.503	-11.396	-0.166	1.00	24.06	6	A	C
ATOM	2217	CZ	TYR A 284	22.399	-11.892	-1.437	1.00	23.33	6	A	C
ATOM	2218	OH	TYR A 284	23.492	-11.942	-2.280	1.00	24.93	8	A	O
ATOM	2219	N	THR A 285	18.552	-12.228	4.240	1.00	24.92	7	A	N
ATOM	2220	CA	THR A 285	17.699	-11.835	5.359	1.00	24.00	6	A	C
ATOM	2221	C	THR A 285	18.385	-10.648	6.024	1.00	22.77	6	A	C
ATOM	2222	O	THR A 285	19.379	-10.133	5.503	1.00	22.99	8	A	O
ATOM	2223	CB	THR A 285	17.490	-13.069	6.252	1.00	27.11	6	A	C
ATOM	2224	OG1	THR A 285	16.436	-12.760	7.204	1.00	31.43	8	A	O
ATOM	2225	CG2	THR A 285	18.718	-13.377	7.094	1.00	26.87	6	A	C
ATOM	2226	N	ARG A 286	17.972	-10.182	7.189	1.00	19.87	7	A	N
ATOM	2227	CA	ARG A 286	18.632	-9.112	7.915	1.00	18.94	6	A	C
ATOM	2228	C	ARG A 286	18.870	-9.617	9.353	1.00	23.09	6	A	C
ATOM	2229	O	ARG A 286	18.036	-10.393	9.820	1.00	21.83	8	A	O
ATOM	2230	CB	ARG A 286	17.783	-7.860	7.927	1.00	20.22	6	A	C
ATOM	2231	CG	ARG A 286	17.522	-7.223	6.566	1.00	19.53	6	A	C
ATOM	2232	CD	ARG A 286	18.782	-6.696	5.858	1.00	22.04	6	A	C
ATOM	2233	NE	ARG A 286	18.403	-6.183	4.522	1.00	21.08	7	A	N
ATOM	2234	CZ	ARG A 286	18.067	-6.915	3.460	1.00	21.77	6	A	C
ATOM	2235	NH1	ARG A 286	18.118	-8.245	3.357	1.00	18.52	7	A	N
ATOM	2236	NH2	ARG A 286	17.613	-6.251	2.393	1.00	18.36	7	A	N
ATOM	2237	N	ARG A 287	19.888	-9.119	10.053	1.00	23.39	7	A	N
ATOM	2238	CA	ARG A 287	20.140	-9.576	11.417	1.00	25.10	6	A	C
ATOM	2239	C	ARG A 287	19.145	-8.995	12.401	1.00	24.84	6	A	C
ATOM	2240	O	ARG A 287	18.760	-9.604	13.410	1.00	23.48	8	A	O
ATOM	2241	CB	ARG A 287	21.588	-9.221	11.808	1.00	27.12	6	A	C
ATOM	2242	CG	ARG A 287	21.937	-9.650	13.228	0.50	29.63	6	A	C
ATOM	2243	CG	BARG A 287	22.100	-10.082	12.955	0.50	29.95	6	A	C
ATOM	2244	CD	AARG A 287	23.369	-9.284	13.611	0.50	30.96	6	A	C
ATOM	2245	CD	BARG A 287	23.379	-9.544	13.580	0.50	31.55	6	A	C
ATOM	2246	NE	AARG A 287	23.488	-7.871	13.916	0.50	32.88	7	A	N
ATOM	2247	NE	BARG A 287	24.518	-9.582	12.703	0.50	33.51	7	A	N
ATOM	2248	CZ	AARG A 287	23.219	-7.259	15.064	0.50	33.91	6	A	C
ATOM	2249	CZ	BARG A 287	25.275	-10.569	12.266	0.50	34.85	6	A	C
ATOM	2250	NH1AARG	A 287	23.369	-5.938	15.153	0.50	33.85	7	A	N
ATOM	2251	NH1BARG	A 287	26.292	-10.311	11.436	0.50	34.71	7	A	N
ATOM	2252	NH2AARG	A 287	22.829	-7.921	16.143	0.50	34.75	7	A	N
ATOM	2253	NH2BARG	A 287	25.044	-11.820	12.647	0.50	35.22	7	A	N
ATOM	2254	N	THR A 288	18.709	-7.751	12.173	1.00	21.54	7	A	N
ATOM	2255	CA	THR A 288	17.754	-7.082	13.048	1.00	20.53	6	A	C
ATOM	2256	C	THR A 288	16.706	-6.406	12.171	1.00	21.88	6	A	C
ATOM	2257	O	THR A 288	16.859	-6.384	10.943	1.00	18.73	8	A	O
ATOM	2258	CB	THR A 288	18.496	-5.992	13.861	1.00	20.52	6	A	C
ATOM	2259	OG1	THR A 288	19.340	-5.261	12.955	1.00	21.75	8	A	O
ATOM	2260	CG2	THR A 288	19.359	-6.616	14.967	1.00	19.61	6	A	C
ATOM	2261	N	ASN A 289	15.709	-5.755	12.789	1.00	21.71	7	A	N
ATOM	2262	CA	ASN A 289	14.676	-5.113	11.980	1.00	21.70	6	A	C
ATOM	2263	C	ASN A 289	14.376	-3.714	12.527	1.00	21.64	6	A	C
ATOM	2264	O	ASN A 289	13.234	-3.270	12.639	1.00	23.47	8	A	O
ATOM	2265	CB	ASN A 289	13.445	-5.970	11.797	1.00	18.74	6	A	C
ATOM	2266	CG	ASN A 289	12.371	-5.368	10.865	1.00	21.12	6	A	C
ATOM	2267	OD1	ASN A 289	12.788	-4.662	9.936	1.00	18.75	8	A	O
ATOM	2268	ND2	ASN A 289	11.095	-5.679	11.140	1.00	18.71	7	A	N
ATOM	2269	N	ASN A 290	15.424	-2.966	12.805	1.00	18.08	7	A	N
ATOM	2270	CA	ASN A 290	15.271	-1.572	13.245	1.00	19.28	6	A	C
ATOM	2271	C	ASN A 290	14.581	-0.693	12.182	1.00	19.42	6	A	C
ATOM	2272	O	ASN A 290	14.096	0.386	12.514	1.00	18.44	8	A	O
ATOM	2273	CB	ASN A 290	16.686	-1.038	13.507	1.00	20.41	6	A	C
ATOM	2274	CG	ASN A 290	17.389	-1.721	14.699	1.00	23.07	6	A	C
ATOM	2275	OD1	ASN A 290	16.773	-1.998	15.711	1.00	22.62	8	A	O
ATOM	2276	ND2	ASN A 290	18.677	-1.958	14.547	1.00	22.73	7	A	N
ATOM	2277	N	LEU A 291	14.711	-1.002	10.914	1.00	18.70	7	A	N
ATOM	2278	CA	LEU A 291	14.131	-0.263	9.803	1.00	19.25	6	A	C
ATOM	2279	C	LEU A 291	12.676	-0.593	9.505	1.00	16.74	6	A	C
ATOM	2280	O	LEU A 291	12.040	0.045	8.664	1.00	18.37	8	A	O
ATOM	2281	CB	LEU A 291	14.985	-0.509	8.546	1.00	18.54	6	A	C

30/188

ATOM	2282	CG	LEU	A	291	16.453	-0.062	8.696	1.00	18.83	6	A	C
ATOM	2283	CD1	LEU	A	291	17.271	-0.438	7.489	1.00	19.63	6	A	C
ATOM	2284	CD2	LEU	A	291	16.571	1.411	8.996	1.00	16.87	6	A	C
ATOM	2285	N	GLY	A	292	12.088	-1.551	10.196	1.00	17.34	7	A	N
ATOM	2286	CA	GLY	A	292	10.661	-1.864	10.066	1.00	18.14	6	A	C
ATOM	2287	C	GLY	A	292	10.277	-2.337	8.659	1.00	18.95	6	A	C
ATOM	2288	O	GLY	A	292	9.117	-2.130	8.256	1.00	19.85	8	A	O
ATOM	2289	N	GLY	A	293	11.170	-3.118	8.027	1.00	17.06	7	A	N
ATOM	2290	CA	GLY	A	293	10.857	-3.746	6.759	1.00	16.18	6	A	C
ATOM	2291	C	GLY	A	293	11.054	-2.899	5.514	1.00	17.78	6	A	C
ATOM	2292	O	GLY	A	293	10.501	-3.289	4.485	1.00	17.49	8	A	O
ATOM	2293	N	PHE	A	294	11.632	-1.703	5.626	1.00	15.59	7	A	N
ATOM	2294	CA	PHE	A	294	11.823	-0.840	4.481	1.00	18.13	6	A	C
ATOM	2295	C	PHE	A	294	13.245	-0.317	4.332	1.00	19.13	6	A	C
ATOM	2296	O	PHE	A	294	13.949	0.071	5.250	1.00	18.93	8	A	O
ATOM	2297	CB	PHE	A	294	10.961	0.453	4.547	1.00	20.64	6	A	C
ATOM	2298	CG	PHE	A	294	9.500	0.162	4.355	1.00	20.86	6	A	C
ATOM	2299	CD1	PHE	A	294	8.700	0.056	5.485	1.00	20.98	6	A	C
ATOM	2300	CD2	PHE	A	294	8.962	-0.042	3.109	1.00	19.02	6	A	C
ATOM	2301	CE1	PHE	A	294	7.353	-0.262	5.325	1.00	19.28	6	A	C
ATOM	2302	CE2	PHE	A	294	7.611	-0.331	2.947	1.00	20.38	6	A	C
ATOM	2303	CZ	PHE	A	294	6.816	-0.439	4.075	1.00	20.20	6	A	C
ATOM	2304	N	GLU	A	295	13.693	-0.288	3.080	1.00	20.29	7	A	N
ATOM	2305	CA	GLU	A	295	15.020	0.224	2.711	1.00	19.04	6	A	C
ATOM	2306	C	GLU	A	295	14.823	1.000	1.406	1.00	16.17	6	A	C
ATOM	2307	O	GLU	A	295	14.312	0.336	0.498	1.00	17.60	8	A	O
ATOM	2308	CB	GLU	A	295	16.011	-0.923	2.455	1.00	18.21	6	A	C
ATOM	2309	CG	GLU	A	295	16.542	-1.558	3.737	1.00	17.43	6	A	C
ATOM	2310	CD	GLU	A	295	17.144	-2.949	3.537	1.00	19.35	6	A	C
ATOM	2311	OE1	GLU	A	295	17.424	-3.405	2.395	1.00	18.84	8	A	O
ATOM	2312	OE2	GLU	A	295	17.439	-3.546	4.600	1.00	18.45	8	A	O
ATOM	2313	N	GLY	A	296	14.999	2.280	1.362	1.00	15.02	7	A	N
ATOM	2314	CA	GLY	A	296	14.819	2.966	0.074	1.00	15.84	6	A	C
ATOM	2315	C	GLY	A	296	13.370	2.950	-0.414	1.00	17.81	6	A	C
ATOM	2316	O	GLY	A	296	13.163	3.004	-1.629	1.00	16.46	8	A	O
ATOM	2317	N	GLY	A	297	12.404	3.026	0.500	1.00	17.93	7	A	N
ATOM	2318	CA	GLY	A	297	10.984	3.068	0.121	1.00	19.13	6	A	C
ATOM	2319	C	GLY	A	297	10.518	1.720	-0.391	1.00	21.18	6	A	C
ATOM	2320	O	GLY	A	297	9.366	1.633	-0.858	1.00	22.56	8	A	O
ATOM	2321	N	MET	A	298	11.340	0.687	-0.170	1.00	17.72	7	A	N
ATOM	2322	CA	MET	A	298	11.011	-0.622	-0.692	1.00	17.38	6	A	C
ATOM	2323	C	MET	A	298	10.995	-1.694	0.400	1.00	17.78	6	A	C
ATOM	2324	O	MET	A	298	11.784	-1.590	1.332	1.00	19.04	8	A	O
ATOM	2325	CB	MET	A	298	12.060	-1.017	-1.752	1.00	15.58	6	A	C
ATOM	2326	CG	MET	A	298	11.997	-0.050	-2.922	1.00	17.80	6	A	C
ATOM	2327	SE	MET	A	298	13.557	-0.715	-4.107	1.00	34.88	34	A	SE
ATOM	2328	CE2	MET	A	298	14.999	-0.342	-2.678	1.00	18.07	6	A	C
ATOM	2329	N	THR	A	299	10.127	-2.679	0.297	1.00	18.34	7	A	N
ATOM	2330	CA	THR	A	299	10.076	-3.753	1.283	1.00	18.06	6	A	C
ATOM	2331	C	THR	A	299	11.346	-4.592	1.206	1.00	17.95	6	A	C
ATOM	2332	O	THR	A	299	11.692	-5.004	0.100	1.00	18.32	8	A	O
ATOM	2333	CB	THR	A	299	8.889	-4.697	1.058	1.00	17.07	6	A	C
ATOM	2334	OG1	THR	A	299	8.877	-5.174	-0.273	1.00	15.34	8	A	O
ATOM	2335	CG2	THR	A	299	7.590	-3.909	1.309	1.00	17.92	6	A	C
ATOM	2336	N	ASN	A	300	11.988	-4.862	2.342	1.00	18.79	7	A	N
ATOM	2337	CA	ASN	A	300	13.237	-5.638	2.253	1.00	18.37	6	A	C
ATOM	2338	C	ASN	A	300	13.033	-7.108	2.585	1.00	21.12	6	A	C
ATOM	2339	O	ASN	A	300	13.961	-7.936	2.635	1.00	18.85	8	A	O
ATOM	2340	CB	ASN	A	300	14.241	-4.952	3.181	1.00	18.86	6	A	C
ATOM	2341	CG	ASN	A	300	13.926	-5.055	4.657	1.00	19.74	6	A	C
ATOM	2342	OD1	ASN	A	300	12.901	-5.583	5.044	1.00	18.37	8	A	O
ATOM	2343	ND2	ASN	A	300	14.762	-4.515	5.545	1.00	18.82	7	A	N
ATOM	2344	N	GLY	A	301	11.776	-7.440	2.882	1.00	19.10	7	A	N
ATOM	2345	CA	GLY	A	301	11.394	-8.766	3.296	1.00	19.04	6	A	C
ATOM	2346	C	GLY	A	301	11.363	-8.998	4.781	1.00	20.68	6	A	C
ATOM	2347	O	GLY	A	301	10.871	-10.085	5.137	1.00	22.85	8	A	O
ATOM	2348	N	GLN	A	302	11.739	-8.079	5.652	1.00	18.90	7	A	N
ATOM	2349	CA	GLN	A	302	11.506	-8.271	7.089	1.00	20.24	6	A	C
ATOM	2350	C	GLN	A	302	10.044	-7.858	7.350	1.00	19.46	6	A	C
ATOM	2351	O	GLN	A	302	9.384	-7.308	6.452	1.00	21.39	8	A	O
ATOM	2352	CB	GLN	A	302	12.476	-7.427	7.917	1.00	20.02	6	A	C
ATOM	2353	CG	GLN	A	302	13.964	-7.848	7.818	1.00	22.01	6	A	C
ATOM	2354	CD	GLN	A	302	14.083	-9.268	8.386	1.00	24.31	6	A	C
ATOM	2355	OE1	GLN	A	302	13.760	-9.541	9.543	1.00	25.78	8	A	O
ATOM	2356	NE2	GLN	A	302	14.561	-10.211	7.607	1.00	21.43	7	A	N
ATOM	2357	N	PRO	A	303	9.496	-8.121	8.507	1.00	19.64	7	A	N
ATOM	2358	CA	PRO	A	303	8.121	-7.777	8.818	1.00	18.81	6	A	C
ATOM	2359	C	PRO	A	303	7.978	-6.259	8.707	1.00	18.98	6	A	C
ATOM	2360	O	PRO	A	303	8.896	-5.570	9.130	1.00	17.02	8	A	O

31/188

ATOM	2361	CB	PRO	A	303	7.946	-8.154	10.285	1.00	21.80	6	A	C
ATOM	2362	CG	PRO	A	303	9.002	-9.199	10.556	1.00	22.18	6	A	C
ATOM	2363	CD	PRO	A	303	10.148	-8.898	9.608	1.00	21.34	6	A	C
ATOM	2364	N	ILE	A	304	6.876	-5.796	8.125	1.00	17.22	7	A	N
ATOM	2365	CA	ILE	A	304	6.627	-4.344	8.164	1.00	17.64	6	A	C
ATOM	2366	C	ILE	A	304	6.186	-4.006	9.590	1.00	19.30	6	A	C
ATOM	2367	O	ILE	A	304	5.307	-4.760	10.068	1.00	20.16	8	A	O
ATOM	2368	CB	ILE	A	304	5.529	-3.971	7.157	1.00	17.56	6	A	C
ATOM	2369	CG1	ILE	A	304	6.134	-4.151	5.734	1.00	18.23	6	A	C
ATOM	2370	CG2	ILE	A	304	5.082	-2.534	7.385	1.00	17.88	6	A	C
ATOM	2371	CD1	ILE	A	304	5.156	-3.885	4.594	1.00	19.61	6	A	C
ATOM	2372	N	VAL	A	305	6.796	-3.010	10.201	1.00	18.14	7	A	N
ATOM	2373	CA	VAL	A	305	6.457	-2.593	11.534	1.00	18.27	6	A	C
ATOM	2374	C	VAL	A	305	6.157	-1.101	11.518	1.00	16.98	6	A	C
ATOM	2375	O	VAL	A	305	7.045	-0.276	11.354	1.00	15.11	8	A	O
ATOM	2376	CB	VAL	A	305	7.550	-2.905	12.584	1.00	20.80	6	A	C
ATOM	2377	CG1	VAL	A	305	7.109	-2.412	13.971	1.00	18.85	6	A	C
ATOM	2378	CG2	VAL	A	305	7.865	-4.405	12.619	1.00	19.89	6	A	C
ATOM	2379	N	VAL	A	306	4.885	-0.761	11.724	1.00	16.95	7	A	N
ATOM	2380	CA	VAL	A	306	4.521	0.665	11.714	1.00	18.67	6	A	C
ATOM	2381	C	VAL	A	306	3.608	0.937	12.912	1.00	18.23	6	A	C
ATOM	2382	O	VAL	A	306	2.839	0.068	13.328	1.00	15.70	8	A	O
ATOM	2383	CB	VAL	A	306	3.862	0.988	10.352	1.00	18.47	6	A	C
ATOM	2384	CG1	VAL	A	306	2.669	0.080	10.137	1.00	20.78	6	A	C
ATOM	2385	CG2	VAL	A	306	3.420	2.441	10.167	1.00	13.81	6	A	C
ATOM	2386	N	ARG	A	307	3.733	2.144	13.431	1.00	18.22	7	A	N
ATOM	2387	CA	ARG	A	307	2.950	2.555	14.593	1.00	17.95	6	A	C
ATOM	2388	C	ARG	A	307	2.388	3.938	14.276	1.00	19.25	6	A	C
ATOM	2389	O	ARG	A	307	3.050	4.713	13.576	1.00	16.41	8	A	O
ATOM	2390	CB	ARG	A	307	3.816	2.690	15.849	1.00	20.51	6	A	C
ATOM	2391	CG	ARG	A	307	4.389	1.405	16.370	1.00	22.18	6	A	C
ATOM	2392	CD	ARG	A	307	5.067	1.641	17.764	1.00	24.79	6	A	C
ATOM	2393	NE	ARG	A	307	6.368	2.220	17.505	1.00	27.85	7	A	N
ATOM	2394	CZ	ARG	A	307	7.496	1.650	17.110	1.00	29.32	6	A	C
ATOM	2395	NH1	ARG	A	307	7.580	0.344	16.918	1.00	32.43	7	A	N
ATOM	2396	NH2	ARG	A	307	8.597	2.377	16.914	1.00	30.91	7	A	N
ATOM	2397	N	GLY	A	308	1.198	4.132	14.762	1.00	15.79	7	A	N
ATOM	2398	CA	GLY	A	308	0.500	5.412	14.575	1.00	17.19	6	A	C
ATOM	2399	C	GLY	A	308	0.056	5.871	15.979	1.00	14.26	6	A	C
ATOM	2400	O	GLY	A	308	-0.285	5.073	16.851	1.00	14.42	8	A	O
ATOM	2401	N	VAL	A	309	0.032	7.172	16.221	1.00	16.10	7	A	N
ATOM	2402	CA	VAL	A	309	-0.426	7.681	17.496	1.00	13.96	6	A	C
ATOM	2403	C	VAL	A	309	-1.824	8.208	17.252	1.00	16.64	6	A	C
ATOM	2404	O	VAL	A	309	-2.121	8.915	16.269	1.00	16.37	8	A	O
ATOM	2405	CB	VAL	A	309	0.489	8.824	18.027	1.00	15.86	6	A	C
ATOM	2406	CG1	VAL	A	309	0.840	9.880	16.962	1.00	15.17	6	A	C
ATOM	2407	CG2	VAL	A	309	-0.232	9.560	19.138	1.00	14.16	6	A	C
ATOM	2408	N	MET	A	310	-2.713	7.908	18.152	1.00	18.12	7	A	N
ATOM	2409	CA	MET	A	310	-4.095	8.370	18.071	1.00	19.90	6	A	C
ATOM	2410	C	MET	A	310	-4.281	9.386	19.188	1.00	18.76	6	A	C
ATOM	2411	O	MET	A	310	-3.876	9.019	20.307	1.00	20.06	8	A	O
ATOM	2412	CB	MET	A	310	-5.104	7.246	18.344	1.00	19.46	6	A	C
ATOM	2413	CG	MET	A	310	-6.505	7.805	18.159	1.00	20.59	6	A	C
ATOM	2414	SE	MET	A	310	-7.825	6.466	19.056	1.00	41.39	34	A	SE
ATOM	2415	CE2	MET	A	310	-9.432	7.026	18.223	1.00	18.83	6	A	C
ATOM	2416	N	LYS	A	311	-4.618	10.617	18.885	1.00	18.88	7	A	N
ATOM	2417	CA	LYS	A	311	-4.866	11.561	20.009	1.00	19.15	6	A	C
ATOM	2418	C	LYS	A	311	-6.119	11.098	20.747	1.00	21.32	6	A	C
ATOM	2419	O	LYS	A	311	-6.914	10.312	20.209	1.00	20.86	8	A	O
ATOM	2420	CB	LYS	A	311	-5.048	12.956	19.425	1.00	20.10	6	A	C
ATOM	2421	CG	LYS	A	311	-6.480	13.279	18.983	1.00	19.68	6	A	C
ATOM	2422	CD	LYS	A	311	-6.448	14.544	18.081	1.00	19.59	6	A	C
ATOM	2423	CE	LYS	A	311	-7.944	14.997	18.006	1.00	19.01	6	A	C
ATOM	2424	NZ	LYS	A	311	-8.109	15.917	16.853	1.00	16.79	7	A	N
ATOM	2425	N	PRO	A	312	-6.401	11.624	21.946	1.00	21.35	7	A	N
ATOM	2426	CA	PRO	A	312	-7.567	11.199	22.684	1.00	21.31	6	A	C
ATOM	2427	C	PRO	A	312	-8.796	11.692	21.947	1.00	23.29	6	A	C
ATOM	2428	O	PRO	A	312	-8.727	12.709	21.250	1.00	21.97	8	A	O
ATOM	2429	CB	PRO	A	312	-7.487	11.898	24.050	1.00	23.18	6	A	C
ATOM	2430	CG	PRO	A	312	-6.080	12.437	24.138	1.00	23.56	6	A	C
ATOM	2431	CD	PRO	A	312	-5.528	12.532	22.725	1.00	21.87	6	A	C
ATOM	2432	N	ILE	A	313	-9.906	11.021	22.162	1.00	24.33	7	A	N
ATOM	2433	CA	ILE	A	313	-11.207	11.399	21.668	1.00	27.96	6	A	C
ATOM	2434	C	ILE	A	313	-11.351	12.861	22.125	1.00	27.74	6	A	C
ATOM	2435	O	ILE	A	313	-11.236	13.085	23.323	1.00	29.26	8	A	O
ATOM	2436	CB	ILE	A	313	-12.340	10.602	22.404	1.00	29.14	6	A	C
ATOM	2437	CG1	ILE	A	313	-12.428	9.164	21.976	1.00	27.98	6	A	C
ATOM	2438	CG2	ILE	A	313	-13.697	11.325	22.354	1.00	27.70	6	A	C
ATOM	2439	CD1	ILE	A	313	-12.082	8.825	20.537	0.50	28.73	6	A	C

32/188

ATOM	2440	CD1BIL	A	313	-13.635	8.335	22.250	0.50	26.65	6	A	C	
ATOM	2441	N	PRO	A	314	-11.773	13.729	21.239	1.00	27.91	7	A	N
ATOM	2442	CA	PRO	A	314	-11.954	15.139	21.562	1.00	28.46	6	A	C
ATOM	2443	C	PRO	A	314	-13.134	15.458	22.462	1.00	31.01	6	A	C
ATOM	2444	O	PRO	A	314	-13.050	16.452	23.211	1.00	30.90	8	A	O
ATOM	2445	CB	PRO	A	314	-12.146	15.821	20.221	1.00	27.29	6	A	C
ATOM	2446	CG	PRO	A	314	-11.632	14.837	19.210	1.00	27.06	6	A	C
ATOM	2447	CD	PRO	A	314	-11.881	13.463	19.798	1.00	26.34	6	A	C
ATOM	2448	N	THR	A	315	-14.219	14.706	22.410	1.00	32.96	7	A	N
ATOM	2449	CA	THR	A	315	-15.369	15.063	23.261	1.00	33.98	6	A	C
ATOM	2450	C	THR	A	315	-15.180	14.682	24.717	1.00	34.31	6	A	C
ATOM	2451	O	THR	A	315	-15.025	13.499	25.048	1.00	31.45	8	A	O
ATOM	2452	CB	THR	A	315	-16.634	14.370	22.734	1.00	36.18	6	A	C
ATOM	2453	OG1	THR	A	315	-16.332	12.970	22.809	1.00	37.94	8	A	O
ATOM	2454	CG2	THR	A	315	-16.961	14.689	21.298	1.00	33.71	6	A	C
ATOM	2455	N	LEU	A	316	-15.229	15.689	25.614	1.00	32.72	7	A	N
ATOM	2456	CA	LEU	A	316	-14.996	15.423	27.018	1.00	34.52	6	A	C
ATOM	2457	C	LEU	A	316	-16.162	15.893	27.911	1.00	34.87	6	A	C
ATOM	2458	O	LEU	A	316	-16.927	16.746	27.498	1.00	31.18	8	A	O
ATOM	2459	CB	LEU	A	316	-13.798	16.202	27.595	1.00	33.43	6	A	C
ATOM	2460	CG	LEU	A	316	-12.547	16.369	26.720	1.00	32.84	6	A	C
ATOM	2461	CD1	LEU	A	316	-11.621	17.371	27.381	1.00	30.85	6	A	C
ATOM	2462	CD2	LEU	A	316	-11.869	15.043	26.474	1.00	30.26	6	A	C
ATOM	2463	N	TYR	A	317	-16.127	15.373	29.140	1.00	36.11	7	A	N
ATOM	2464	CA	TYR	A	317	-17.101	15.823	30.152	1.00	36.74	6	A	C
ATOM	2465	C	TYR	A	317	-16.474	17.065	30.806	1.00	35.96	6	A	C
ATOM	2466	O	TYR	A	317	-17.143	18.025	31.125	1.00	35.91	8	A	O
ATOM	2467	CB	TYR	A	317	-17.353	14.742	31.195	1.00	39.09	6	A	C
ATOM	2468	CG	TYR	A	317	-18.243	15.192	32.341	1.00	41.32	6	A	C
ATOM	2469	CD1	TYR	A	317	-19.544	15.595	32.079	1.00	41.93	6	A	C
ATOM	2470	CD2	TYR	A	317	-17.782	15.225	33.647	1.00	42.80	6	A	C
ATOM	2471	CE1	TYR	A	317	-20.370	16.019	33.099	1.00	43.05	6	A	C
ATOM	2472	CE2	TYR	A	317	-18.597	15.669	34.686	1.00	43.90	6	A	C
ATOM	2473	CZ	TYR	A	317	-19.889	16.055	34.394	1.00	43.46	6	A	C
ATOM	2474	OH	TYR	A	317	-20.722	16.478	35.397	1.00	43.54	8	A	O
ATOM	2475	N	LYS	A	318	-15.163	17.078	30.950	1.00	35.13	7	A	N
ATOM	2476	CA	LYS	A	318	-14.413	18.237	31.419	1.00	36.82	6	A	C
ATOM	2477	C	LYS	A	318	-14.704	19.334	30.374	1.00	36.08	6	A	C
ATOM	2478	O	LYS	A	318	-14.862	19.031	29.197	1.00	34.73	8	A	O
ATOM	2479	CB	LYS	A	318	-12.920	18.018	31.590	1.00	37.55	6	A	C
ATOM	2480	CG	LYS	A	318	-12.471	16.924	32.541	1.00	38.98	6	A	C
ATOM	2481	CD	LYS	A	318	-10.973	16.799	32.662	1.00	39.42	6	A	C
ATOM	2482	CE	LYS	A	318	-10.422	17.807	33.668	1.00	40.28	6	A	C
ATOM	2483	NZ	LYS	A	318	-10.861	17.388	35.047	1.00	42.00	7	A	N
ATOM	2484	N	PRO	A	319	-14.894	20.562	30.819	1.00	35.45	7	A	N
ATOM	2485	CA	PRO	A	319	-15.284	21.634	29.935	1.00	36.05	6	A	C
ATOM	2486	C	PRO	A	319	-14.142	22.072	29.036	1.00	35.34	6	A	C
ATOM	2487	O	PRO	A	319	-12.992	22.043	29.456	1.00	34.78	8	A	O
ATOM	2488	CB	PRO	A	319	-15.661	22.796	30.868	1.00	36.39	6	A	C
ATOM	2489	CG	PRO	A	319	-14.930	22.504	32.145	1.00	36.93	6	A	C
ATOM	2490	CD	PRO	A	319	-14.675	21.022	32.218	1.00	35.85	6	A	C
ATOM	2491	N	LEU	A	320	-14.512	22.529	27.840	1.00	34.32	7	A	N
ATOM	2492	CA	LEU	A	320	-13.501	23.079	26.923	1.00	33.05	6	A	C
ATOM	2493	C	LEU	A	320	-14.188	24.314	26.324	1.00	29.71	6	A	C
ATOM	2494	O	LEU	A	320	-15.346	24.201	25.955	1.00	31.19	8	A	O
ATOM	2495	CB	LEU	A	320	-13.069	22.077	25.864	1.00	31.45	6	A	C
ATOM	2496	CG	LEU	A	320	-12.272	20.838	26.275	1.00	32.04	6	A	C
ATOM	2497	CD1	LEU	A	320	-12.243	19.794	25.177	1.00	30.80	6	A	C
ATOM	2498	CD2	LEU	A	320	-10.867	21.237	26.719	1.00	32.71	6	A	C
ATOM	2499	N	MET	A	321	-13.579	25.486	26.390	1.00	29.27	7	A	N
ATOM	2500	CA	MET	A	321	-14.134	26.705	25.835	1.00	24.50	6	A	C
ATOM	2501	C	MET	A	321	-14.283	26.548	24.309	1.00	24.49	6	A	C
ATOM	2502	O	MET	A	321	-13.398	26.042	23.583	1.00	22.07	8	A	O
ATOM	2503	CB	MET	A	321	-13.174	27.844	26.158	1.00	24.54	6	A	C
ATOM	2504	CG	MET	A	321	-12.961	28.132	27.652	1.00	26.30	6	A	C
ATOM	2505	SE	MET	A	321	-14.863	28.266	28.514	1.00	56.79	34	A	SE
ATOM	2506	CE2	MET	A	321	-15.743	29.819	27.664	1.00	33.27	6	A	C
ATOM	2507	N	SER	A	322	-15.393	27.054	23.823	1.00	22.60	7	A	N
ATOM	2508	CA	SER	A	322	-15.717	27.129	22.411	1.00	23.34	6	A	C
ATOM	2509	C	SER	A	322	-16.576	28.391	22.222	1.00	25.63	6	A	C
ATOM	2510	O	SER	A	322	-16.668	29.178	23.189	1.00	26.45	8	A	O
ATOM	2511	CB	SER	A	322	-16.425	25.913	21.872	1.00	21.75	6	A	C
ATOM	2512	OG	SER	A	322	-16.494	25.900	20.454	1.00	21.20	8	A	O
ATOM	2513	N	VAL	A	323	-17.179	28.518	21.065	1.00	24.33	7	A	N
ATOM	2514	CA	VAL	A	323	-17.925	29.691	20.697	1.00	25.33	6	A	C
ATOM	2515	C	VAL	A	323	-19.215	29.303	19.971	1.00	25.48	6	A	C
ATOM	2516	O	VAL	A	323	-19.189	28.488	19.051	1.00	25.68	8	A	O
ATOM	2517	CB	VAL	A	323	-17.095	30.610	19.773	1.00	24.94	6	A	C
ATOM	2518	CG1	VAL	A	323	-17.931	31.791	19.280	1.00	24.19	6	A	C

33/188

ATOM	2519	CG2 VAL A 323	-15.830	31.119	20.446	1.00	22.60	6	A	C
ATOM	2520	N ASP A 324	-20.303	29.973	20.291	1.00	24.98	7	A	N
ATOM	2521	CA ASP A 324	-21.566	29.791	19.585	1.00	27.97	6	A	C
ATOM	2522	C ASP A 324	-21.493	30.457	18.210	1.00	26.06	6	A	C
ATOM	2523	O ASP A 324	-21.337	31.690	18.178	1.00	24.75	8	A	O
ATOM	2524	CB ASP A 324	-22.705	30.383	20.426	1.00	31.73	6	A	C
ATOM	2525	CG ASP A 324	-24.073	30.236	19.791	1.00	35.81	6	A	C
ATOM	2526	OD1 ASP A 324	-24.322	30.522	18.602	1.00	38.21	8	A	O
ATOM	2527	OD2 ASP A 324	-25.005	29.824	20.520	1.00	37.52	8	A	O
ATOM	2528	N ILE A 325	-21.707	29.728	17.114	1.00	23.76	7	A	N
ATOM	2529	CA ILE A 325	-21.501	30.365	15.802	1.00	27.84	6	A	C
ATOM	2530	C ILE A 325	-22.630	31.298	15.393	1.00	28.25	6	A	C
ATOM	2531	O ILE A 325	-22.423	32.088	14.470	1.00	27.26	8	A	O
ATOM	2532	CB ILE A 325	-21.186	29.421	14.636	1.00	27.02	6	A	C
ATOM	2533	CG1 ILE A 325	-22.403	28.608	14.225	1.00	28.34	6	A	C
ATOM	2534	CG2 ILE A 325	-19.979	28.590	15.036	1.00	27.09	6	A	C
ATOM	2535	CD1 ILE A 325	-22.284	27.786	12.954	1.00	28.07	6	A	C
ATOM	2536	N GLU A 326	-23.783	31.241	16.058	1.00	31.25	7	A	N
ATOM	2537	CA GLU A 326	-24.832	32.204	15.663	1.00	33.71	6	A	C
ATOM	2538	C GLU A 326	-24.675	33.503	16.432	1.00	32.13	6	A	C
ATOM	2539	O GLU A 326	-25.145	34.543	15.957	1.00	34.83	8	A	O
ATOM	2540	CB GLU A 326	-26.229	31.662	15.955	1.00	37.24	6	A	C
ATOM	2541	CG GLU A 326	-26.757	30.719	14.895	1.00	42.98	6	A	C
ATOM	2542	CD GLU A 326	-28.135	30.194	15.260	1.00	46.37	6	A	C
ATOM	2543	OE1 GLU A 326	-28.539	30.294	16.445	1.00	47.77	8	A	O
ATOM	2544	OE2 GLU A 326	-28.781	29.685	14.320	1.00	48.72	8	A	O
ATOM	2545	N THR A 327	-23.975	33.471	17.559	1.00	30.79	7	A	N
ATOM	2546	CA THR A 327	-23.922	34.643	18.414	1.00	32.08	6	A	C
ATOM	2547	C THR A 327	-22.521	35.176	18.659	1.00	31.43	6	A	C
ATOM	2548	O THR A 327	-22.401	36.329	19.064	1.00	29.04	8	A	O
ATOM	2549	CB THR A 327	-24.572	34.372	19.785	1.00	31.78	6	A	C
ATOM	2550	OG1 THR A 327	-23.777	33.404	20.474	1.00	32.20	8	A	O
ATOM	2551	CG2 THR A 327	-26.007	33.853	19.606	1.00	34.23	6	A	C
ATOM	2552	N HIS A 328	-21.520	34.348	18.416	1.00	29.45	7	A	N
ATOM	2553	CA HIS A 328	-20.147	34.746	18.620	1.00	30.02	6	A	C
ATOM	2554	C HIS A 328	-19.829	34.794	20.112	1.00	30.12	6	A	C
ATOM	2555	O HIS A 328	-18.742	35.188	20.472	1.00	28.91	8	A	O
ATOM	2556	CB HIS A 328	-19.795	36.074	17.950	1.00	29.05	6	A	C
ATOM	2557	CG HIS A 328	-19.560	35.943	16.475	1.00	29.97	6	A	C
ATOM	2558	ND1 HIS A 328	-19.973	36.892	15.571	1.00	29.37	7	A	N
ATOM	2559	CD2 HIS A 328	-18.974	34.953	15.748	1.00	29.69	6	A	C
ATOM	2560	CE1 HIS A 328	-19.618	36.527	14.345	1.00	29.16	6	A	C
ATOM	2561	NE2 HIS A 328	-19.006	35.341	14.427	1.00	29.19	7	A	N
ATOM	2562	N GLU A 329	-20.752	34.369	20.945	1.00	32.17	7	A	N
ATOM	2563	CA GLU A 329	-20.583	34.301	22.380	1.00	33.20	6	A	C
ATOM	2564	C GLU A 329	-19.879	33.007	22.771	1.00	32.67	6	A	C
ATOM	2565	O GLU A 329	-20.066	31.949	22.188	1.00	30.53	8	A	O
ATOM	2566	CB GLU A 329	-21.927	34.394	23.136	1.00	35.86	6	A	C
ATOM	2567	CG AGLU A 329	-22.493	35.797	23.182	0.50	37.30	6	A	C
ATOM	2568	CG BGLU A 329	-22.260	35.850	23.428	0.50	39.08	6	A	C
ATOM	2569	CD AGLU A 329	-21.552	36.764	23.882	0.50	37.73	6	A	C
ATOM	2570	CD BGLU A 329	-23.727	36.212	23.395	0.50	41.09	6	A	C
ATOM	2571	OE1AGLU A 329	-20.709	36.314	24.675	0.50	38.74	8	A	O
ATOM	2572	OE1BGLU A 329	-24.039	37.371	23.000	0.50	41.32	8	A	O
ATOM	2573	OE2AGLU A 329	-21.652	37.973	23.619	0.50	38.85	8	A	O
ATOM	2574	OE2BGLU A 329	-24.560	35.353	23.760	0.50	41.76	8	A	O
ATOM	2575	N PRO A 330	-19.050	33.111	23.797	1.00	32.57	7	A	N
ATOM	2576	CA PRO A 330	-18.307	31.955	24.263	1.00	33.25	6	A	C
ATOM	2577	C PRO A 330	-19.276	31.035	25.005	1.00	34.47	6	A	C
ATOM	2578	O PRO A 330	-20.318	31.510	25.463	1.00	30.19	8	A	O
ATOM	2579	CB PRO A 330	-17.271	32.558	25.178	1.00	33.16	6	A	C
ATOM	2580	CG PRO A 330	-17.692	33.934	25.514	1.00	33.62	6	A	C
ATOM	2581	CD PRO A 330	-18.799	34.338	24.587	1.00	33.94	6	A	C
ATOM	2582	N TYR A 331	-18.945	29.764	25.119	1.00	35.80	7	A	N
ATOM	2583	CA TYR A 331	-19.790	28.833	25.877	1.00	39.04	6	A	C
ATOM	2584	C TYR A 331	-18.862	27.690	26.317	1.00	39.56	6	A	C
ATOM	2585	O TYR A 331	-17.772	27.609	25.711	1.00	37.60	8	A	O
ATOM	2586	CB TYR A 331	-20.997	28.272	25.145	1.00	40.71	6	A	C
ATOM	2587	CG TYR A 331	-20.561	27.211	24.140	1.00	42.16	6	A	C
ATOM	2588	CD1 TYR A 331	-20.626	25.846	24.403	1.00	41.31	6	A	C
ATOM	2589	CD2 TYR A 331	-20.042	27.644	22.926	1.00	42.62	6	A	C
ATOM	2590	CE1 TYR A 331	-20.209	24.936	23.458	1.00	41.61	6	A	C
ATOM	2591	CE2 TYR A 331	-19.615	26.745	21.970	1.00	41.76	6	A	C
ATOM	2592	CZ TYR A 331	-19.691	25.395	22.262	1.00	42.32	6	A	C
ATOM	2593	OH TYR A 331	-19.260	24.521	21.292	1.00	41.58	8	A	O
ATOM	2594	N LYS A 332	-19.253	26.887	27.315	1.00	38.80	7	A	N
ATOM	2595	CA LYS A 332	-18.313	25.796	27.637	1.00	39.83	6	A	C
ATOM	2596	C LYS A 332	-18.908	24.486	27.137	1.00	39.60	6	A	C
ATOM	2597	O LYS A 332	-20.049	24.125	27.419	1.00	37.65	8	A	O

34/188

ATOM	2598	CB	LYS	A	332	-17.771	25.700	29.028	1.00	43.93	6	A	C
ATOM	2599	CG	LYS	A	332	-18.628	25.586	30.252	1.00	46.96	6	A	C
ATOM	2600	CD	LYS	A	332	-17.811	25.950	31.488	1.00	48.74	6	A	C
ATOM	2601	CE	LYS	A	332	-17.566	27.445	31.585	1.00	50.61	6	A	C
ATOM	2602	NZ	LYS	A	332	-16.363	27.741	32.419	1.00	50.81	7	A	N
ATOM	2603	N	ALA	A	333	-18.100	23.793	26.332	1.00	39.48	7	A	N
ATOM	2604	CA	ALA	A	333	-18.561	22.513	25.771	1.00	40.63	6	A	C
ATOM	2605	C	ALA	A	333	-18.245	21.404	26.779	1.00	42.52	6	A	C
ATOM	2606	O	ALA	A	333	-17.158	21.284	27.356	1.00	39.92	8	A	O
ATOM	2607	CB	ALA	A	333	-17.942	22.267	24.406	1.00	39.94	6	A	C
ATOM	2608	N	THR	A	334	-19.268	20.585	26.976	1.00	45.60	7	A	N
ATOM	2609	CA	THR	A	334	-19.192	19.449	27.900	1.00	49.05	6	A	C
ATOM	2610	C	THR	A	334	-20.230	18.413	27.457	1.00	50.70	6	A	C
ATOM	2611	O	THR	A	334	-21.310	18.718	26.936	1.00	49.68	8	A	O
ATOM	2612	CB	THR	A	334	-19.368	19.911	29.351	1.00	49.65	6	A	C
ATOM	2613	OG1	THR	A	334	-19.272	18.822	30.284	1.00	50.03	8	A	O
ATOM	2614	CG2	THR	A	334	-20.719	20.599	29.526	1.00	49.93	6	A	C
ATOM	2615	N	VAL	A	335	-19.795	17.158	27.449	1.00	51.69	7	A	N
ATOM	2616	CA	VAL	A	335	-20.649	16.057	26.984	1.00	54.01	6	A	C
ATOM	2617	C	VAL	A	335	-20.698	15.081	28.155	1.00	55.21	6	A	C
ATOM	2618	O	VAL	A	335	-19.624	14.744	28.661	1.00	53.99	8	A	O
ATOM	2619	CB	VAL	A	335	-20.122	15.476	25.672	1.00	53.61	6	A	C
ATOM	2620	CG1	VAL	A	335	-20.878	14.222	25.256	1.00	53.76	6	A	C
ATOM	2621	CG2	VAL	A	335	-20.242	16.528	24.568	1.00	53.02	6	A	C
ATOM	2622	N	GLU	A	336	-21.907	14.773	28.619	1.00	57.14	7	A	N
ATOM	2623	CA	GLU	A	336	-21.994	13.960	29.838	1.00	59.25	6	A	C
ATOM	2624	C	GLU	A	336	-21.617	12.509	29.590	1.00	59.59	6	A	C
ATOM	2625	O	GLU	A	336	-20.945	11.935	30.452	1.00	60.17	8	A	O
ATOM	2626	CB	GLU	A	336	-23.324	14.084	30.553	1.00	58.97	6	A	C
ATOM	2627	CG	GLU	A	336	-24.597	13.923	29.745	1.00	60.27	6	A	C
ATOM	2628	CD	GLU	A	336	-25.792	14.304	30.635	1.00	59.96	6	A	C
ATOM	2629	OE1	GLU	A	336	-26.489	13.384	31.109	1.00	59.74	8	A	O
ATOM	2630	OE2	GLU	A	336	-26.013	15.509	30.854	1.00	58.69	8	A	O
ATOM	2631	N	ARG	A	337	-22.081	11.938	28.493	1.00	59.21	7	A	N
ATOM	2632	CA	ARG	A	337	-21.698	10.581	28.131	1.00	59.61	6	A	C
ATOM	2633	C	ARG	A	337	-21.039	10.584	26.750	1.00	56.50	6	A	C
ATOM	2634	O	ARG	A	337	-21.575	10.977	25.721	1.00	57.91	8	A	O
ATOM	2635	CB	ARG	A	337	-22.854	9.601	28.157	1.00	62.53	6	A	C
ATOM	2636	CG	ARG	A	337	-23.937	9.890	27.126	1.00	65.51	6	A	C
ATOM	2637	CD	ARG	A	337	-25.126	8.967	27.307	1.00	67.88	6	A	C
ATOM	2638	NE	ARG	A	337	-25.409	8.790	28.730	1.00	70.06	7	A	N
ATOM	2639	CZ	ARG	A	337	-25.863	9.742	29.534	1.00	70.83	6	A	C
ATOM	2640	NH1	ARG	A	337	-26.090	10.967	29.075	1.00	71.29	7	A	N
ATOM	2641	NH2	ARG	A	337	-26.079	9.481	30.813	1.00	71.12	7	A	N
ATOM	2642	N	SER	A	338	-19.789	10.214	26.753	1.00	52.05	7	A	N
ATOM	2643	CA	SER	A	338	-18.879	10.113	25.620	1.00	47.49	6	A	C
ATOM	2644	C	SER	A	338	-18.081	8.845	25.939	1.00	43.03	6	A	C
ATOM	2645	O	SER	A	338	-18.127	8.454	27.114	1.00	42.73	8	A	O
ATOM	2646	CB	SER	A	338	-17.931	11.307	25.569	1.00	49.00	6	A	C
ATOM	2647	OG	SER	A	338	-16.595	11.022	25.098	1.00	49.19	8	A	O
ATOM	2648	N	ASP	A	339	-17.434	8.206	24.988	1.00	36.69	7	A	N
ATOM	2649	CA	ASP	A	339	-16.588	7.071	25.352	1.00	31.66	6	A	C
ATOM	2650	C	ASP	A	339	-15.281	7.682	25.828	1.00	30.03	6	A	C
ATOM	2651	O	ASP	A	339	-14.931	8.772	25.388	1.00	29.40	8	A	O
ATOM	2652	CB	ASP	A	339	-16.366	6.109	24.198	1.00	31.57	6	A	C
ATOM	2653	CG	ASP	A	339	-17.611	5.502	23.591	1.00	31.39	6	A	C
ATOM	2654	OD1	ASP	A	339	-18.674	5.455	24.229	1.00	28.74	8	A	O
ATOM	2655	OD2	ASP	A	339	-17.571	5.039	22.427	1.00	30.73	8	A	O
ATOM	2656	N	PRO	A	340	-14.611	7.063	26.792	1.00	27.83	7	A	N
ATOM	2657	CA	PRO	A	340	-13.353	7.542	27.316	1.00	27.21	6	A	C
ATOM	2658	C	PRO	A	340	-12.215	7.236	26.339	1.00	25.09	6	A	C
ATOM	2659	O	PRO	A	340	-11.255	7.957	26.332	1.00	24.69	8	A	O
ATOM	2660	CB	PRO	A	340	-13.178	6.752	28.622	1.00	27.14	6	A	C
ATOM	2661	CG	PRO	A	340	-13.924	5.496	28.366	1.00	27.41	6	A	C
ATOM	2662	CD	PRO	A	340	-15.068	5.827	27.459	1.00	26.72	6	A	C
ATOM	2663	N	THR	A	341	-12.378	6.188	25.517	1.00	23.94	7	A	N
ATOM	2664	CA	THR	A	341	-11.361	5.799	24.553	1.00	23.18	6	A	C
ATOM	2665	C	THR	A	341	-11.910	4.906	23.448	1.00	24.39	6	A	C
ATOM	2666	O	THR	A	341	-12.929	4.267	23.619	1.00	23.60	8	A	O
ATOM	2667	CB	THR	A	341	-10.176	5.096	25.223	1.00	23.40	6	A	C
ATOM	2668	OG1	THR	A	341	-9.128	5.051	24.223	1.00	24.86	8	A	O
ATOM	2669	CG2	THR	A	341	-10.479	3.694	25.759	1.00	22.12	6	A	C
ATOM	2670	N	ALA	A	342	-11.331	4.989	22.239	1.00	23.37	7	A	N
ATOM	2671	CA	ALA	A	342	-11.681	4.119	21.124	1.00	22.89	6	A	C
ATOM	2672	C	ALA	A	342	-10.379	3.596	20.508	1.00	22.95	6	A	C
ATOM	2673	O	ALA	A	342	-10.311	3.207	19.334	1.00	22.25	8	A	O
ATOM	2674	CB	ALA	A	342	-12.568	4.861	20.129	1.00	21.19	6	A	C
ATOM	2675	N	LEU	A	343	-9.345	3.462	21.345	1.00	20.91	7	A	N
ATOM	2676	CA	LEU	A	343	-8.045	2.995	20.872	1.00	20.83	6	A	C

35/188

ATOM	2677	C	LEU	A	343	-7.992	1.617	20.259	1.00	20.82	6	A	C
ATOM	2678	O	LEU	A	343	-7.464	1.450	19.138	1.00	20.33	8	A	O
ATOM	2679	CB	LEU	A	343	-6.963	3.315	21.926	1.00	21.91	6	A	C
ATOM	2680	CG	LEU	A	343	-5.536	2.984	21.448	1.00	23.38	6	A	C
ATOM	2681	CD1	LEU	A	343	-5.075	3.972	20.365	1.00	23.03	6	A	C
ATOM	2682	CD2	LEU	A	343	-4.564	3.022	22.611	1.00	22.34	6	A	C
ATOM	2683	N	PRO	A	344	-8.512	0.572	20.845	1.00	21.21	7	A	N
ATOM	2684	CA	PRO	A	344	-8.499	-0.772	20.299	1.00	21.37	6	A	C
ATOM	2685	C	PRO	A	344	-9.245	-0.810	18.942	1.00	18.68	6	A	C
ATOM	2686	O	PRO	A	344	-8.676	-1.370	18.012	1.00	20.27	8	A	O
ATOM	2687	CB	PRO	A	344	-9.143	-1.631	21.385	1.00	19.41	6	A	C
ATOM	2688	CG	PRO	A	344	-8.866	-0.829	22.655	1.00	21.52	6	A	C
ATOM	2689	CD	PRO	A	344	-9.082	0.616	22.248	1.00	19.27	6	A	C
ATOM	2690	N	ALA	A	345	-10.351	-0.169	18.779	1.00	19.98	7	A	N
ATOM	2691	CA	ALA	A	345	-11.085	-0.070	17.500	1.00	21.20	6	A	C
ATOM	2692	C	ALA	A	345	-10.235	0.671	16.461	1.00	20.26	6	A	C
ATOM	2693	O	ALA	A	345	-10.104	0.222	15.317	1.00	17.31	8	A	O
ATOM	2694	CB	ALA	A	345	-12.423	0.564	17.793	1.00	21.78	6	A	C
ATOM	2695	N	ALA	A	346	-9.527	1.723	16.874	1.00	19.99	7	A	N
ATOM	2696	CA	ALA	A	346	-8.646	2.463	15.975	1.00	19.32	6	A	C
ATOM	2697	C	ALA	A	346	-7.510	1.572	15.461	1.00	19.83	6	A	C
ATOM	2698	O	ALA	A	346	-7.008	1.718	14.342	1.00	19.69	8	A	O
ATOM	2699	CB	ALA	A	346	-8.018	3.658	16.714	1.00	21.55	6	A	C
ATOM	2700	N	GLY	A	347	-7.072	0.613	16.252	1.00	17.77	7	A	N
ATOM	2701	CA	GLY	A	347	-6.065	-0.356	15.907	1.00	19.19	6	A	C
ATOM	2702	C	GLY	A	347	-6.603	-1.261	14.786	1.00	18.67	6	A	C
ATOM	2703	O	GLY	A	347	-5.829	-1.553	13.866	1.00	19.08	8	A	O
ATOM	2704	N	MET	A	348	-7.841	-1.712	14.936	1.00	17.15	7	A	N
ATOM	2705	CA	MET	A	348	-8.431	-2.455	13.805	1.00	18.83	6	A	C
ATOM	2706	C	MET	A	348	-8.425	-1.548	12.549	1.00	18.60	6	A	C
ATOM	2707	O	MET	A	348	-8.143	-2.016	11.419	1.00	16.47	8	A	O
ATOM	2708	CB	MET	A	348	-9.890	-2.768	14.127	1.00	15.71	6	A	C
ATOM	2709	CG	MET	A	348	-10.596	-3.692	13.152	1.00	21.84	6	A	C
ATOM	2710	SE	MET	A	348	-9.782	-5.386	12.748	1.00	50.27	34	A	SE
ATOM	2711	CE2	MET	A	348	-9.013	-4.941	10.632	1.00	13.71	6	A	C
ATOM	2712	N	VAL	A	349	-8.858	-0.286	12.705	1.00	17.93	7	A	N
ATOM	2713	CA	VAL	A	349	-8.937	0.547	11.464	1.00	14.61	6	A	C
ATOM	2714	C	VAL	A	349	-7.522	0.643	10.909	1.00	14.44	6	A	C
ATOM	2715	O	VAL	A	349	-7.271	0.566	9.695	1.00	16.03	8	A	O
ATOM	2716	CB	VAL	A	349	-9.450	1.977	11.723	1.00	17.60	6	A	C
ATOM	2717	CG1	VAL	A	349	-9.555	2.756	10.381	1.00	14.89	6	A	C
ATOM	2718	CG2	VAL	A	349	-10.853	1.998	12.355	1.00	15.71	6	A	C
ATOM	2719	N	MET	A	350	-6.509	0.839	11.760	1.00	14.47	7	A	N
ATOM	2720	CA	MET	A	350	-5.131	0.918	11.267	1.00	15.60	6	A	C
ATOM	2721	C	MET	A	350	-4.711	-0.338	10.506	1.00	17.43	6	A	C
ATOM	2722	O	MET	A	350	-4.079	-0.247	9.438	1.00	19.15	8	A	O
ATOM	2723	CB	MET	A	350	-4.139	1.239	12.389	1.00	14.81	6	A	C
ATOM	2724	CG	MET	A	350	-2.732	1.537	11.814	1.00	15.80	6	A	C
ATOM	2725	SE	MET	A	350	-1.440	1.645	13.268	1.00	34.83	34	A	SE
ATOM	2726	CE2	MET	A	350	0.259	1.815	12.188	1.00	10.62	6	A	C
ATOM	2727	N	GLU	A	351	-5.021	-1.511	10.999	1.00	16.86	7	A	N
ATOM	2728	CA	GLU	A	351	-4.661	-2.762	10.320	1.00	16.25	6	A	C
ATOM	2729	C	GLU	A	351	-5.337	-2.791	8.947	1.00	16.89	6	A	C
ATOM	2730	O	GLU	A	351	-4.722	-3.150	7.949	1.00	15.42	8	A	O
ATOM	2731	CB	GLU	A	351	-5.149	-3.964	11.133	1.00	16.63	6	A	C
ATOM	2732	CG	GLU	A	351	-5.145	-5.340	10.465	1.00	17.87	6	A	C
ATOM	2733	CD	GLU	A	351	-5.607	-6.438	11.411	1.00	21.84	6	A	C
ATOM	2734	OE1	GLU	A	351	-5.469	-6.325	12.641	1.00	22.85	8	A	O
ATOM	2735	OE2	GLU	A	351	-6.193	-7.456	11.002	1.00	22.61	8	A	O
ATOM	2736	N	ALA	A	352	-6.589	-2.346	8.948	1.00	16.86	7	A	N
ATOM	2737	CA	ALA	A	352	-7.308	-2.423	7.670	1.00	18.97	6	A	C
ATOM	2738	C	ALA	A	352	-6.659	-1.461	6.666	1.00	16.49	6	A	C
ATOM	2739	O	ALA	A	352	-6.650	-1.815	5.481	1.00	17.38	8	A	O
ATOM	2740	CB	ALA	A	352	-8.774	-2.132	7.838	1.00	17.29	6	A	C
ATOM	2741	N	VAL	A	353	-6.352	-0.245	7.068	1.00	18.38	7	A	N
ATOM	2742	CA	VAL	A	353	-5.865	0.700	6.049	1.00	17.48	6	A	C
ATOM	2743	C	VAL	A	353	-4.488	0.231	5.596	1.00	17.79	6	A	C
ATOM	2744	O	VAL	A	353	-4.185	0.412	4.425	1.00	14.95	8	A	O
ATOM	2745	CB	VAL	A	353	-5.934	2.181	6.411	1.00	18.59	6	A	C
ATOM	2746	CG1	VAL	A	353	-7.290	2.496	7.107	1.00	18.12	6	A	C
ATOM	2747	CG2	VAL	A	353	-4.750	2.650	7.180	1.00	23.36	6	A	C
ATOM	2748	N	VAL	A	354	-3.693	-0.329	6.532	1.00	17.32	7	A	N
ATOM	2749	CA	VAL	A	354	-2.355	-0.821	6.134	1.00	17.79	6	A	C
ATOM	2750	C	VAL	A	354	-2.460	-1.964	5.160	1.00	18.59	6	A	C
ATOM	2751	O	VAL	A	354	-1.751	-2.053	4.126	1.00	18.74	8	A	O
ATOM	2752	CB	VAL	A	354	-1.546	-1.279	7.372	1.00	19.13	6	A	C
ATOM	2753	CG1	VAL	A	354	-0.330	-2.132	6.952	1.00	15.96	6	A	C
ATOM	2754	CG2	VAL	A	354	-1.052	-0.109	8.198	1.00	16.29	6	A	C
ATOM	2755	N	ALA	A	355	-3.363	-2.900	5.507	1.00	17.54	7	A	N

36/188

ATOM	2756	CA	ALA A 355	-3.593	-4.043	4.616	1.00	19.03	6	A	C
ATOM	2757	C	ALA A 355	-4.046	-3.518	3.252	1.00	17.92	6	A	C
ATOM	2758	O	ALA A 355	-3.670	-4.004	2.188	1.00	19.00	8	A	O
ATOM	2759	CB	ALA A 355	-4.671	-4.976	5.196	1.00	16.40	6	A	C
ATOM	2760	N	THR A 356	-4.902	-2.498	3.231	1.00	17.20	7	A	N
ATOM	2761	CA	THR A 356	-5.401	-1.964	1.953	1.00	15.78	6	A	C
ATOM	2762	C	THR A 356	-4.281	-1.442	1.056	1.00	17.57	6	A	C
ATOM	2763	O	THR A 356	-4.310	-1.669	-0.167	1.00	15.09	8	A	O
ATOM	2764	CB	THR A 356	-6.462	-0.869	2.226	1.00	16.89	6	A	C
ATOM	2765	OG1	THR A 356	-7.557	-1.452	2.964	1.00	16.41	8	A	O
ATOM	2766	CG2	THR A 356	-7.087	-0.350	0.922	1.00	15.50	6	A	C
ATOM	2767	N	VAL A 357	-3.416	-0.586	1.604	1.00	17.81	7	A	N
ATOM	2768	CA	VAL A 357	-2.305	-0.025	0.824	1.00	18.08	6	A	C
ATOM	2769	C	VAL A 357	-1.362	-1.085	0.297	1.00	17.37	6	A	C
ATOM	2770	O	VAL A 357	-0.863	-1.042	-0.841	1.00	15.66	8	A	O
ATOM	2771	CB	VAL A 357	-1.549	1.015	1.691	1.00	17.42	6	A	C
ATOM	2772	CG1	VAL A 357	-0.213	1.423	1.055	1.00	16.03	6	A	C
ATOM	2773	CG2	VAL A 357	-2.417	2.263	1.829	1.00	13.89	6	A	C
ATOM	2774	N	LEU A 358	-1.106	-2.119	1.077	1.00	17.46	7	A	N
ATOM	2775	CA	LEU A 358	-0.243	-3.198	0.632	1.00	20.74	6	A	C
ATOM	2776	C	LEU A 358	-0.898	-3.949	-0.522	1.00	20.15	6	A	C
ATOM	2777	O	LEU A 358	-0.203	-4.355	-1.451	1.00	22.19	8	A	O
ATOM	2778	CB	LEU A 358	0.038	-4.233	1.737	1.00	23.37	6	A	C
ATOM	2779	CG	LEU A 358	1.436	-4.249	2.318	1.00	28.15	6	A	C
ATOM	2780	CD1	LEU A 358	2.539	-4.396	1.261	1.00	25.21	6	A	C
ATOM	2781	CD2	LEU A 358	1.588	-2.936	3.078	1.00	26.60	6	A	C
ATOM	2782	N	ALA A 359	-2.179	-4.264	-0.368	1.00	18.51	7	A	N
ATOM	2783	CA	ALA A 359	-2.875	-4.939	-1.451	1.00	20.80	6	A	C
ATOM	2784	C	ALA A 359	-2.757	-4.070	-2.711	1.00	19.08	6	A	C
ATOM	2785	O	ALA A 359	-2.455	-4.608	-3.774	1.00	19.71	8	A	O
ATOM	2786	CB	ALA A 359	-4.349	-5.207	-1.140	1.00	19.89	6	A	C
ATOM	2787	N	GLN A 360	-2.991	-2.757	-2.588	1.00	18.51	7	A	N
ATOM	2788	CA	GLN A 360	-2.845	-1.878	-3.731	1.00	15.90	6	A	C
ATOM	2789	C	GLN A 360	-1.460	-1.956	-4.371	1.00	17.10	6	A	C
ATOM	2790	O	GLN A 360	-1.371	-1.997	-5.612	1.00	13.21	8	A	O
ATOM	2791	CB	GLN A 360	-3.119	-0.411	-3.330	1.00	17.32	6	A	C
ATOM	2792	CG	GLN A 360	-4.627	-0.118	-3.149	1.00	18.87	6	A	C
ATOM	2793	CD	GLN A 360	-4.913	1.293	-2.691	1.00	17.05	6	A	C
ATOM	2794	OE1	GLN A 360	-4.490	1.685	-1.619	1.00	18.85	8	A	O
ATOM	2795	NE2	GLN A 360	-5.754	2.066	-3.375	1.00	15.42	7	A	N
ATOM	2796	N	GLU A 361	-0.419	-1.953	-3.501	1.00	17.08	7	A	N
ATOM	2797	CA	GLU A 361	0.936	-2.011	-4.020	1.00	20.35	6	A	C
ATOM	2798	C	GLU A 361	1.175	-3.327	-4.744	1.00	19.05	6	A	C
ATOM	2799	O	GLU A 361	1.773	-3.366	-5.813	1.00	19.55	8	A	O
ATOM	2800	CB	GLU A 361	1.948	-1.757	-2.875	1.00	19.67	6	A	C
ATOM	2801	CG	GLU A 361	3.370	-1.564	-3.385	1.00	18.81	6	A	C
ATOM	2802	CD	GLU A 361	3.528	-0.191	-4.031	1.00	21.12	6	A	C
ATOM	2803	OE1	GLU A 361	2.827	0.728	-3.558	1.00	20.57	8	A	O
ATOM	2804	OE2	GLU A 361	4.272	-0.047	-5.019	1.00	19.98	8	A	O
ATOM	2805	N	ILE A 362	0.757	-4.442	-4.154	1.00	15.74	7	A	N
ATOM	2806	CA	ILE A 362	0.832	-5.739	-4.777	1.00	16.60	6	A	C
ATOM	2807	C	ILE A 362	0.122	-5.823	-6.132	1.00	17.47	6	A	C
ATOM	2808	O	ILE A 362	0.697	-6.242	-7.144	1.00	17.95	8	A	O
ATOM	2809	CB	ILE A 362	0.254	-6.807	-3.816	1.00	18.04	6	A	C
ATOM	2810	CG1	ILE A 362	1.324	-7.094	-2.741	1.00	17.39	6	A	C
ATOM	2811	CG2	ILE A 362	-0.069	-8.107	-4.530	1.00	18.83	6	A	C
ATOM	2812	CD1	ILE A 362	0.672	-7.664	-1.481	1.00	21.26	6	A	C
ATOM	2813	N	LEU A 363	-1.070	-5.238	-6.214	1.00	19.01	7	A	N
ATOM	2814	CA	LEU A 363	-1.859	-5.247	-7.445	1.00	18.98	6	A	C
ATOM	2815	C	LEU A 363	-1.156	-4.471	-8.531	1.00	18.53	6	A	C
ATOM	2816	O	LEU A 363	-1.240	-4.765	-9.711	1.00	21.51	8	A	O
ATOM	2817	CB	LEU A 363	-3.262	-4.710	-7.106	1.00	16.70	6	A	C
ATOM	2818	CG	LEU A 363	-4.075	-5.689	-6.243	1.00	18.46	6	A	C
ATOM	2819	CD1	LEU A 363	-5.484	-5.181	-6.020	1.00	16.40	6	A	C
ATOM	2820	CD2	LEU A 363	-4.168	-7.077	-6.855	1.00	17.49	6	A	C
ATOM	2821	N	GLU A 364	-0.417	-3.436	-8.143	1.00	18.84	7	A	N
ATOM	2822	CA	GLU A 364	0.334	-2.617	-9.060	1.00	17.95	6	A	C
ATOM	2823	C	GLU A 364	1.601	-3.305	-9.521	1.00	17.17	6	A	C
ATOM	2824	O	GLU A 364	1.972	-3.245	-10.691	1.00	16.39	8	A	O
ATOM	2825	CB	GLU A 364	0.768	-1.320	-8.273	1.00	18.23	6	A	C
ATOM	2826	CG	AGLU A 364	1.370	-0.331	-9.258	0.50	19.63	6	A	C
ATOM	2827	CG	BGLU A 364	-0.491	-0.452	-8.224	0.50	21.82	6	A	C
ATOM	2828	CD	AGLU A 364	2.156	0.819	-8.695	0.50	20.29	6	A	C
ATOM	2829	CD	BGLU A 364	-0.300	0.938	-7.663	0.50	22.69	6	A	C
ATOM	2830	OE1	AGLU A 364	2.236	1.015	-7.484	0.50	19.29	8	A	O
ATOM	2831	OE1	BGLU A 364	0.848	1.319	-7.384	0.50	21.01	8	A	O
ATOM	2832	OE2	AGLU A 364	2.783	1.598	-9.461	0.50	23.51	8	A	O
ATOM	2833	OE2	BGLU A 364	-1.349	1.592	-7.569	0.50	22.40	8	A	O
ATOM	2834	N	LYS A 365	2.262	-3.999	-8.585	1.00	14.85	7	A	N

37/188

ATOM	2835	CA	LYS	A	365	3.553	-4.600	-8.895	1.00	16.90	6	A	C
ATOM	2836	C	LYS	A	365	3.417	-5.806	-9.791	1.00	14.85	6	A	C
ATOM	2837	O	LYS	A	365	4.272	-6.032	-10.652	1.00	16.61	8	A	O
ATOM	2838	CB	LYS	A	365	4.364	-5.029	-7.622	1.00	13.79	6	A	C
ATOM	2839	CG	LYS	A	365	5.724	-5.665	-8.067	1.00	16.58	6	A	C
ATOM	2840	CD	LYS	A	365	6.755	-5.661	-6.939	1.00	17.91	6	A	C
ATOM	2841	CE	LYS	A	365	7.912	-6.626	-7.186	1.00	17.00	6	A	C
ATOM	2842	NZ	LYS	A	365	8.501	-6.453	-8.553	1.00	16.88	7	A	N
ATOM	2843	N	PHE	A	366	2.440	-6.660	-9.490	1.00	16.13	7	A	N
ATOM	2844	CA	PHE	A	366	2.286	-7.898	-10.244	1.00	17.34	6	A	C
ATOM	2845	C	PHE	A	366	1.067	-7.979	-11.160	1.00	18.94	6	A	C
ATOM	2846	O	PHE	A	366	-0.034	-7.552	-10.793	1.00	21.25	8	A	O
ATOM	2847	CB	PHE	A	366	2.188	-9.098	-9.269	1.00	16.01	6	A	C
ATOM	2848	CG	PHE	A	366	3.346	-9.149	-8.265	1.00	16.80	6	A	C
ATOM	2849	CD1	PHE	A	366	3.134	-8.729	-6.964	1.00	15.63	6	A	C
ATOM	2850	CD2	PHE	A	366	4.584	-9.588	-8.608	1.00	15.18	6	A	C
ATOM	2851	CE1	PHE	A	366	4.151	-8.778	-6.017	1.00	18.81	6	A	C
ATOM	2852	CE2	PHE	A	366	5.631	-9.676	-7.695	1.00	17.23	6	A	C
ATOM	2853	CZ	PHE	A	366	5.412	-9.263	-6.386	1.00	19.32	6	A	C
ATOM	2854	N	SER	A	367	1.207	-8.755	-12.223	1.00	18.59	7	A	N
ATOM	2855	CA	SER	A	367	0.136	-9.105	-13.153	1.00	19.53	6	A	C
ATOM	2856	C	SER	A	367	-1.029	-9.503	-12.218	1.00	20.32	6	A	C
ATOM	2857	O	SER	A	367	-0.819	-10.414	-11.403	1.00	19.17	8	A	O
ATOM	2858	CB	SER	A	367	0.525	-10.359	-13.968	1.00	18.40	6	A	C
ATOM	2859	OG	SER	A	367	1.568	-10.073	-14.873	1.00	17.99	8	A	O
ATOM	2860	N	SER	A	368	-2.147	-8.817	-12.345	1.00	18.34	7	A	N
ATOM	2861	CA	SER	A	368	-3.219	-9.111	-11.381	1.00	18.60	6	A	C
ATOM	2862	C	SER	A	368	-4.622	-8.862	-11.875	1.00	17.66	6	A	C
ATOM	2863	O	SER	A	368	-5.441	-8.470	-11.042	1.00	18.53	8	A	O
ATOM	2864	CB	SER	A	368	-2.956	-8.268	-10.103	1.00	16.96	6	A	C
ATOM	2865	OG	SER	A	368	-2.868	-6.861	-10.428	1.00	18.08	8	A	O
ATOM	2866	N	ASP	A	369	-4.950	-9.196	-13.132	1.00	18.21	7	A	N
ATOM	2867	CA	ASP	A	369	-6.335	-9.130	-13.594	1.00	19.51	6	A	C
ATOM	2868	C	ASP	A	369	-7.135	-10.252	-12.917	1.00	19.46	6	A	C
ATOM	2869	O	ASP	A	369	-8.340	-10.123	-12.664	1.00	21.56	8	A	O
ATOM	2870	CB	ASP	A	369	-6.429	-9.241	-15.119	1.00	20.96	6	A	C
ATOM	2871	CG	ASP	A	369	-6.094	-7.990	-15.908	1.00	23.68	6	A	C
ATOM	2872	OD1	ASP	A	369	-6.193	-6.860	-15.349	1.00	24.47	8	A	O
ATOM	2873	OD2	ASP	A	369	-5.781	-8.046	-17.115	1.00	20.91	8	A	O
ATOM	2874	N	ASN	A	370	-6.505	-11.400	-12.570	1.00	17.84	7	A	N
ATOM	2875	CA	ASN	A	370	-7.230	-12.464	-11.890	1.00	17.65	6	A	C
ATOM	2876	C	ASN	A	370	-6.332	-13.087	-10.827	1.00	17.24	6	A	C
ATOM	2877	O	ASN	A	370	-5.113	-12.938	-10.859	1.00	17.36	8	A	O
ATOM	2878	CB	ASN	A	370	-7.714	-13.537	-12.924	1.00	17.23	6	A	C
ATOM	2879	CG	ASN	A	370	-6.525	-14.114	-13.683	1.00	17.58	6	A	C
ATOM	2880	OD1	ASN	A	370	-5.758	-14.977	-13.252	1.00	19.43	8	A	O
ATOM	2881	ND2	ASN	A	370	-6.308	-13.623	-14.911	1.00	16.59	7	A	N
ATOM	2882	N	LEU	A	371	-6.910	-13.776	-9.875	1.00	17.20	7	A	N
ATOM	2883	CA	LEU	A	371	-6.124	-14.322	-8.767	1.00	20.10	6	A	C
ATOM	2884	C	LEU	A	371	-5.069	-15.330	-9.203	1.00	19.94	6	A	C
ATOM	2885	O	LEU	A	371	-3.959	-15.406	-8.619	1.00	19.12	8	A	O
ATOM	2886	CB	LEU	A	371	-7.012	-14.974	-7.710	1.00	19.51	6	A	C
ATOM	2887	CG	LEU	A	371	-6.258	-15.468	-6.447	1.00	20.59	6	A	C
ATOM	2888	CD1	LEU	A	371	-5.561	-14.338	-5.694	1.00	18.66	6	A	C
ATOM	2889	CD2	LEU	A	371	-7.245	-16.180	-5.541	1.00	21.01	6	A	C
ATOM	2890	N	GLU	A	372	-5.472	-16.177	-10.159	1.00	19.65	7	A	N
ATOM	2891	CA	GLU	A	372	-4.541	-17.222	-10.586	1.00	19.29	6	A	C
ATOM	2892	C	GLU	A	372	-3.240	-16.650	-11.114	1.00	18.60	6	A	C
ATOM	2893	O	GLU	A	372	-2.141	-17.088	-10.724	1.00	20.28	8	A	O
ATOM	2894	CB	GLU	A	372	-5.228	-18.099	-11.655	1.00	21.84	6	A	C
ATOM	2895	CG	GLU	A	372	-4.397	-19.367	-11.907	1.00	23.66	6	A	C
ATOM	2896	CD	GLU	A	372	-5.029	-20.257	-12.962	1.00	27.56	6	A	C
ATOM	2897	OE1	GLU	A	372	-5.306	-19.837	-14.104	1.00	26.77	8	A	O
ATOM	2898	OE2	GLU	A	372	-5.158	-21.463	-12.678	1.00	30.10	8	A	O
ATOM	2899	N	GLU	A	373	-3.297	-15.631	-11.960	1.00	18.14	7	A	N
ATOM	2900	CA	GLU	A	373	-2.085	-15.066	-12.546	1.00	20.99	6	A	C
ATOM	2901	C	GLU	A	373	-1.335	-14.312	-11.459	1.00	19.27	6	A	C
ATOM	2902	O	GLU	A	373	-0.114	-14.262	-11.520	1.00	21.31	8	A	O
ATOM	2903	CB	GLU	A	373	-2.291	-14.202	-13.816	1.00	20.48	6	A	C
ATOM	2904	CG	GLU	A	373	-3.065	-12.900	-13.568	1.00	18.83	6	A	C
ATOM	2905	CD	GLU	A	373	-3.452	-12.180	-14.860	1.00	21.76	6	A	C
ATOM	2906	OE1	GLU	A	373	-3.741	-12.826	-15.907	1.00	19.18	8	A	O
ATOM	2907	OE2	GLU	A	373	-3.476	-10.932	-14.895	1.00	20.75	8	A	O
ATOM	2908	N	LEU	A	374	-2.064	-13.656	-10.550	1.00	18.64	7	A	N
ATOM	2909	CA	LEU	A	374	-1.421	-12.947	-9.447	1.00	18.71	6	A	C
ATOM	2910	C	LEU	A	374	-0.577	-13.914	-8.628	1.00	17.77	6	A	C
ATOM	2911	O	LEU	A	374	0.542	-13.652	-8.225	1.00	18.05	8	A	O
ATOM	2912	CB	LEU	A	374	-2.433	-12.257	-8.513	1.00	17.28	6	A	C
ATOM	2913	CG	LEU	A	374	-1.991	-11.641	-7.195	1.00	17.72	6	A	C

38/188

ATOM	2914	CD1	LEU	A	374	-0.840	-10.675	-7.448	1.00	19.22	6	A	C
ATOM	2915	CD2	LEU	A	374	-3.181	-10.917	-6.527	1.00	17.08	6	A	C
ATOM	2916	N	LYS	A	375	-1.225	-15.006	-8.197	1.00	21.10	7	A	N
ATOM	2917	CA	LYS	A	375	-0.533	-15.997	-7.372	1.00	20.79	6	A	C
ATOM	2918	C	LYS	A	375	0.725	-16.467	-8.083	1.00	18.90	6	A	C
ATOM	2919	O	LYS	A	375	1.801	-16.626	-7.493	1.00	18.51	8	A	O
ATOM	2920	CB	LYS	A	375	-1.433	-17.188	-7.046	1.00	21.51	6	A	C
ATOM	2921	CG	LYS	A	375	-2.501	-16.904	-6.004	1.00	23.41	6	A	C
ATOM	2922	CD	LYS	A	375	-3.551	-17.961	-5.801	1.00	26.63	6	A	C
ATOM	2923	CE	LYS	A	375	-2.972	-19.352	-5.610	1.00	30.36	6	A	C
ATOM	2924	NZ	LYS	A	375	-4.057	-20.381	-5.468	1.00	35.04	7	A	N
ATOM	2925	N	GLN	A	376	0.571	-16.785	-9.347	1.00	20.31	7	A	N
ATOM	2926	CA	GLN	A	376	1.685	-17.287	-10.157	1.00	21.47	6	A	C
ATOM	2927	C	GLN	A	376	2.814	-16.272	-10.173	1.00	20.09	6	A	C
ATOM	2928	O	GLN	A	376	3.986	-16.633	-10.036	1.00	19.32	8	A	O
ATOM	2929	CB	GLN	A	376	1.248	-17.703	-11.560	1.00	24.80	6	A	C
ATOM	2930	CG	GLN	A	376	0.510	-19.028	-11.606	1.00	29.09	6	A	C
ATOM	2931	CD	GLN	A	376	-0.313	-19.356	-12.841	1.00	32.19	6	A	C
ATOM	2932	OE1	GLN	A	376	-0.660	-18.453	-13.623	1.00	32.72	8	A	O
ATOM	2933	NE2	GLN	A	376	-0.756	-20.622	-12.902	1.00	29.71	7	A	N
ATOM	2934	N	ALA	A	377	2.490	-15.001	-10.418	1.00	18.51	7	A	N
ATOM	2935	CA	ALA	A	377	3.507	-13.972	-10.474	1.00	16.62	6	A	C
ATOM	2936	C	ALA	A	377	4.228	-13.821	-9.132	1.00	17.64	6	A	C
ATOM	2937	O	ALA	A	377	5.437	-13.550	-9.092	1.00	17.58	8	A	O
ATOM	2938	CB	ALA	A	377	2.887	-12.616	-10.866	1.00	15.75	6	A	C
ATOM	2939	N	VAL	A	378	3.455	-13.844	-8.046	1.00	18.23	7	A	N
ATOM	2940	CA	VAL	A	378	4.068	-13.662	-6.706	1.00	18.82	6	A	C
ATOM	2941	C	VAL	A	378	4.992	-14.832	-6.429	1.00	18.06	6	A	C
ATOM	2942	O	VAL	A	378	6.110	-14.638	-5.948	1.00	16.85	8	A	O
ATOM	2943	CB	VAL	A	378	3.055	-13.425	-5.578	1.00	18.66	6	A	C
ATOM	2944	CG1	VAL	A	378	3.747	-13.401	-4.199	1.00	14.98	6	A	C
ATOM	2945	CG2	VAL	A	378	2.385	-12.045	-5.767	1.00	18.58	6	A	C
ATOM	2946	N	ALA	A	379	4.563	-16.026	-6.805	1.00	19.31	7	A	N
ATOM	2947	CA	ALA	A	379	5.394	-17.218	-6.576	1.00	21.59	6	A	C
ATOM	2948	C	ALA	A	379	6.707	-17.141	-7.346	1.00	22.71	6	A	C
ATOM	2949	O	ALA	A	379	7.774	-17.458	-6.788	1.00	21.36	8	A	O
ATOM	2950	CB	ALA	A	379	4.690	-18.529	-6.914	1.00	21.01	6	A	C
ATOM	2951	N	LYS	A	380	6.611	-16.718	-8.591	1.00	20.06	7	A	N
ATOM	2952	CA	LYS	A	380	7.770	-16.591	-9.448	1.00	21.64	6	A	C
ATOM	2953	C	LYS	A	380	8.748	-15.546	-8.888	1.00	21.74	6	A	C
ATOM	2954	O	LYS	A	380	9.965	-15.723	-8.971	1.00	20.98	8	A	O
ATOM	2955	CB	LYS	A	380	7.299	-16.201	-10.862	1.00	24.15	6	A	C
ATOM	2956	CG	LYS	A	380	8.479	-16.135	-11.836	1.00	28.56	6	A	C
ATOM	2957	CD	LYS	A	380	8.021	-16.109	-13.302	1.00	31.03	6	A	C
ATOM	2958	CE	LYS	A	380	8.164	-14.736	-13.891	1.00	34.05	6	A	C
ATOM	2959	NZ	LYS	A	380	9.501	-14.130	-14.152	1.00	29.85	7	A	N
ATOM	2960	N	HIS	A	381	8.160	-14.450	-8.380	1.00	20.29	7	A	N
ATOM	2961	CA	HIS	A	381	8.944	-13.369	-7.818	1.00	19.08	6	A	C
ATOM	2962	C	HIS	A	381	9.614	-13.838	-6.529	1.00	19.25	6	A	C
ATOM	2963	O	HIS	A	381	10.787	-13.551	-6.368	1.00	18.33	8	A	O
ATOM	2964	CB	HIS	A	381	8.075	-12.120	-7.630	1.00	18.82	6	A	C
ATOM	2965	CG	HIS	A	381	8.823	-11.032	-6.900	1.00	17.43	6	A	C
ATOM	2966	ND1	HIS	A	381	9.706	-10.261	-7.585	1.00	18.98	7	A	N
ATOM	2967	CD2	HIS	A	381	8.881	-10.623	-5.616	1.00	16.83	6	A	C
ATOM	2968	CE1	HIS	A	381	10.293	-9.418	-6.742	1.00	17.71	6	A	C
ATOM	2969	NE2	HIS	A	381	9.813	-9.622	-5.536	1.00	17.81	7	A	N
ATOM	2970	N	ARG	A	382	8.952	-14.565	-5.622	1.00	19.23	7	A	N
ATOM	2971	CA	ARG	A	382	9.634	-15.101	-4.438	1.00	19.97	6	A	C
ATOM	2972	C	ARG	A	382	10.739	-16.084	-4.837	1.00	19.87	6	A	C
ATOM	2973	O	ARG	A	382	11.776	-16.143	-4.152	1.00	22.46	8	A	O
ATOM	2974	CB	ARG	A	382	8.636	-15.780	-3.496	1.00	21.74	6	A	C
ATOM	2975	CG	ARG	A	382	7.670	-14.791	-2.832	1.00	22.05	6	A	C
ATOM	2976	CD	ARG	A	382	6.570	-15.485	-2.045	1.00	22.82	6	A	C
ATOM	2977	NE	ARG	A	382	6.014	-14.523	-1.071	1.00	21.91	7	A	N
ATOM	2978	CZ	ARG	A	382	4.753	-14.598	-0.698	1.00	23.26	6	A	C
ATOM	2979	NH1	ARG	A	382	4.293	-13.718	0.179	1.00	19.74	7	A	N
ATOM	2980	NH2	ARG	A	382	3.986	-15.553	-1.250	1.00	23.26	7	A	N
ATOM	2981	N	ASP	A	383	10.556	-16.882	-5.865	1.00	16.18	7	A	N
ATOM	2982	CA	ASP	A	383	11.628	-17.807	-6.302	1.00	20.02	6	A	C
ATOM	2983	C	ASP	A	383	12.845	-17.028	-6.803	1.00	20.87	6	A	C
ATOM	2984	O	ASP	A	383	13.991	-17.288	-6.423	1.00	21.98	8	A	O
ATOM	2985	CB	ASP	A	383	11.054	-18.767	-7.322	1.00	21.40	6	A	C
ATOM	2986	CG	ASP	A	383	12.144	-19.556	-8.042	1.00	24.68	6	A	C
ATOM	2987	OD1	ASP	A	383	12.763	-20.448	-7.479	1.00	23.00	8	A	O
ATOM	2988	OD2	ASP	A	383	12.421	-19.292	-9.225	1.00	28.37	8	A	O
ATOM	2989	N	TYR	A	384	12.635	-15.911	-7.525	1.00	18.82	7	A	N
ATOM	2990	CA	TYR	A	384	13.721	-15.090	-8.032	1.00	20.46	6	A	C
ATOM	2991	C	TYR	A	384	14.471	-14.487	-6.843	1.00	20.33	6	A	C
ATOM	2992	O	TYR	A	384	15.712	-14.439	-6.796	1.00	22.26	8	A	O

39/188

ATOM	2993	CB	TYR	A	384	13.229	-13.924	-8.958	1.00	17.43	6	A	C
ATOM	2994	CG	TYR	A	384	14.405	-13.115	-9.464	1.00	20.42	6	A	C
ATOM	2995	CD1	TYR	A	384	15.150	-13.529	-10.583	1.00	19.66	6	A	C
ATOM	2996	CD2	TYR	A	384	14.826	-11.957	-8.811	1.00	18.03	6	A	C
ATOM	2997	CE1	TYR	A	384	16.249	-12.803	-11.006	1.00	20.71	6	A	C
ATOM	2998	CE2	TYR	A	384	15.911	-11.237	-9.244	1.00	19.39	6	A	C
ATOM	2999	CZ	TYR	A	384	16.611	-11.658	-10.358	1.00	20.47	6	A	C
ATOM	3000	OH	TYR	A	384	17.691	-10.905	-10.761	1.00	24.56	8	A	O
ATOM	3001	N	THR	A	385	13.667	-13.967	-5.935	1.00	17.81	7	A	N
ATOM	3002	CA	THR	A	385	14.218	-13.305	-4.739	1.00	20.13	6	A	C
ATOM	3003	C	THR	A	385	15.125	-14.280	-3.971	1.00	22.07	6	A	C
ATOM	3004	O	THR	A	385	16.212	-13.908	-3.530	1.00	18.94	8	A	O
ATOM	3005	CB	THR	A	385	13.111	-12.794	-3.800	1.00	21.37	6	A	C
ATOM	3006	OG1	THR	A	385	12.324	-11.741	-4.395	1.00	19.94	8	A	O
ATOM	3007	CG2	THR	A	385	13.624	-12.258	-2.462	1.00	20.66	6	A	C
ATOM	3008	N	LYS	A	386	14.593	-15.420	-3.574	1.00	24.24	7	A	N
ATOM	3009	CA	LYS	A	386	15.317	-16.432	-2.797	1.00	23.68	6	A	C
ATOM	3010	C	LYS	A	386	16.585	-16.877	-3.522	1.00	23.81	6	A	C
ATOM	3011	O	LYS	A	386	17.590	-17.185	-2.826	1.00	21.88	8	A	O
ATOM	3012	CB	LYS	A	386	14.381	-17.619	-2.586	1.00	26.99	6	A	C
ATOM	3013	CG	LYS	A	386	14.972	-18.945	-2.147	1.00	32.72	6	A	C
ATOM	3014	CD	LYS	A	386	15.607	-18.984	-0.792	1.00	33.47	6	A	C
ATOM	3015	CE	LYS	A	386	15.326	-20.252	0.011	1.00	37.12	6	A	C
ATOM	3016	NZ	LYS	A	386	15.990	-21.483	-0.482	1.00	37.40	7	A	N
ATOM	3017	N	ASN	A	387	16.553	-16.921	-4.852	1.00	21.55	7	A	N
ATOM	3018	CA	ASN	A	387	17.737	-17.436	-5.562	1.00	23.08	6	A	C
ATOM	3019	C	ASN	A	387	18.666	-16.383	-6.107	1.00	23.80	6	A	C
ATOM	3020	O	ASN	A	387	19.592	-16.643	-6.913	1.00	23.99	8	A	O
ATOM	3021	CB	ASN	A	387	17.165	-18.357	-6.680	1.00	24.42	6	A	C
ATOM	3022	CG	ASN	A	387	16.642	-19.611	-5.975	1.00	26.33	6	A	C
ATOM	3023	OD1	ASN	A	387	17.530	-20.412	-5.620	1.00	25.77	8	A	O
ATOM	3024	ND2	ASN	A	387	15.339	-19.772	-5.752	1.00	23.82	7	A	N
ATOM	3025	N	TYR	A	388	18.484	-15.152	-5.651	1.00	20.31	7	A	N
ATOM	3026	CA	TYR	A	388	19.328	-14.050	-6.165	1.00	23.37	6	A	C
ATOM	3027	C	TYR	A	388	20.785	-14.260	-5.777	1.00	21.88	6	A	C
ATOM	3028	O	TYR	A	388	21.661	-13.871	-6.559	1.00	23.00	8	A	O
ATOM	3029	CB	TYR	A	388	18.838	-12.707	-5.596	1.00	21.24	6	A	C
ATOM	3030	CG	TYR	A	388	19.418	-11.432	-6.107	1.00	22.53	6	A	C
ATOM	3031	CD1	TYR	A	388	19.093	-10.944	-7.364	1.00	23.82	6	A	C
ATOM	3032	CD2	TYR	A	388	20.313	-10.685	-5.335	1.00	22.90	6	A	C
ATOM	3033	CE1	TYR	A	388	19.617	-9.742	-7.859	1.00	22.83	6	A	C
ATOM	3034	CE2	TYR	A	388	20.865	-9.512	-5.813	1.00	23.13	6	A	C
ATOM	3035	CZ	TYR	A	388	20.492	-9.053	-7.062	1.00	23.98	6	A	C
ATOM	3036	OH	TYR	A	388	21.084	-7.913	-7.575	1.00	25.43	8	A	O
ATOM	3037	OT	TYR	A	388	21.071	-14.601	-4.621	1.00	21.35	8	A	O
ATOM	3039	N	MET	B	1	-1.250	21.047	-9.889	1.00	18.06	7	B	N
ATOM	3040	CA	MET	B	1	0.241	21.131	-10.049	1.00	20.39	6	B	C
ATOM	3041	C	MET	B	1	0.899	19.782	-9.823	1.00	20.21	6	B	C
ATOM	3042	O	MET	B	1	0.559	19.062	-8.864	1.00	21.49	8	B	O
ATOM	3043	CB	MET	B	1	0.804	22.208	-9.139	1.00	19.09	6	B	C
ATOM	3044	CG	MET	B	1	2.165	22.696	-9.639	1.00	21.28	6	B	C
ATOM	3045	SE	MET	B	1	3.347	21.802	-8.273	1.00	48.61	34	B	SE
ATOM	3046	CE2	MET	B	1	3.196	23.164	-6.983	1.00	20.66	6	B	C
ATOM	3047	N	ARG	B	2	1.846	19.428	-10.688	1.00	17.53	7	B	N
ATOM	3048	CA	ARG	B	2	2.451	18.101	-10.555	1.00	17.44	6	B	C
ATOM	3049	C	ARG	B	2	3.898	18.250	-11.032	1.00	16.07	6	B	C
ATOM	3050	O	ARG	B	2	4.185	19.314	-11.592	1.00	17.18	8	B	O
ATOM	3051	CB	ARG	B	2	1.668	17.110	-11.410	1.00	17.80	6	B	C
ATOM	3052	CG	ARG	B	2	1.609	17.512	-12.895	1.00	18.10	6	B	C
ATOM	3053	CD	ARG	B	2	0.561	16.611	-13.614	1.00	18.70	6	B	C
ATOM	3054	NE	ARG	B	2	0.165	17.238	-14.863	1.00	20.90	7	B	N
ATOM	3055	CZ	ARG	B	2	-0.305	16.593	-15.929	1.00	20.01	6	B	C
ATOM	3056	NH1	ARG	B	2	-0.649	17.325	-16.984	1.00	20.22	7	B	N
ATOM	3057	NH2	ARG	B	2	-0.475	15.279	-15.940	1.00	15.71	7	B	N
ATOM	3058	N	TYR	B	3	4.758	17.332	-10.756	1.00	14.02	7	B	N
ATOM	3059	CA	TYR	B	3	6.145	17.525	-11.215	1.00	16.73	6	B	C
ATOM	3060	C	TYR	B	3	6.813	16.171	-11.251	1.00	15.57	6	B	C
ATOM	3061	O	TYR	B	3	6.288	15.232	-10.660	1.00	14.24	8	B	O
ATOM	3062	CB	TYR	B	3	6.882	18.481	-10.257	1.00	16.55	6	B	C
ATOM	3063	CG	TYR	B	3	6.843	18.020	-8.815	1.00	19.68	6	B	C
ATOM	3064	CD1	TYR	B	3	7.841	17.227	-8.273	1.00	19.44	6	B	C
ATOM	3065	CD2	TYR	B	3	5.775	18.377	-8.004	1.00	18.36	6	B	C
ATOM	3066	CE1	TYR	B	3	7.823	16.823	-6.936	1.00	20.01	6	B	C
ATOM	3067	CE2	TYR	B	3	5.704	17.923	-6.702	1.00	20.25	6	B	C
ATOM	3068	CZ	TYR	B	3	6.732	17.178	-6.165	1.00	19.72	6	B	C
ATOM	3069	OH	TYR	B	3	6.650	16.741	-4.867	1.00	22.00	8	B	O
ATOM	3070	N	LEU	B	4	7.967	16.111	-11.907	1.00	16.03	7	B	N
ATOM	3071	CA	LEU	B	4	8.801	14.958	-11.950	1.00	16.08	6	B	C
ATOM	3072	C	LEU	B	4	10.266	15.412	-11.671	1.00	18.25	6	B	C

40/188

ATOM	3073	O	LEU	B	4	10.654	16.445	-12.242	1.00	17.31	8	B	O
ATOM	3074	CB	LEU	B	4	8.782	14.151	-13.229	1.00	17.71	6	B	C
ATOM	3075	CG	LEU	B	4	7.498	13.364	-13.509	1.00	18.39	6	B	C
ATOM	3076	CD1	LEU	B	4	7.569	12.807	-14.932	1.00	17.07	6	B	C
ATOM	3077	CD2	LEU	B	4	7.318	12.243	-12.470	1.00	14.95	6	B	C
ATOM	3078	N	THR	B	5	11.065	14.652	-10.945	1.00	17.38	7	B	N
ATOM	3079	CA	THR	B	5	12.515	14.953	-10.814	1.00	17.18	6	B	C
ATOM	3080	C	THR	B	5	13.291	13.843	-11.518	1.00	17.22	6	B	C
ATOM	3081	O	THR	B	5	12.819	12.703	-11.592	1.00	16.22	8	B	O
ATOM	3082	CB	THR	B	5	13.051	15.044	-9.374	1.00	18.12	6	B	C
ATOM	3083	OG1	THR	B	5	12.931	13.764	-8.726	1.00	15.90	8	B	O
ATOM	3084	CG2	THR	B	5	12.267	16.048	-8.556	1.00	15.67	6	B	C
ATOM	3085	N	ALA	B	6	14.484	14.140	-12.025	1.00	15.66	7	B	N
ATOM	3086	CA	ALA	B	6	15.221	13.122	-12.761	1.00	16.95	6	B	C
ATOM	3087	C	ALA	B	6	16.724	13.404	-12.653	1.00	17.24	6	B	C
ATOM	3088	O	ALA	B	6	17.145	14.523	-12.329	1.00	18.53	8	B	O
ATOM	3089	CB	ALA	B	6	14.748	13.169	-14.215	1.00	14.53	6	B	C
ATOM	3090	N	GLY	B	7	17.504	12.342	-12.826	1.00	18.02	7	B	N
ATOM	3091	CA	GLY	B	7	18.944	12.556	-12.718	1.00	19.95	6	B	C
ATOM	3092	C	GLY	B	7	19.596	11.557	-11.781	1.00	21.11	6	B	C
ATOM	3093	O	GLY	B	7	18.956	11.024	-10.874	1.00	18.48	8	B	O
ATOM	3094	N	GLU	B	8	20.863	11.271	-12.077	1.00	21.31	7	B	N
ATOM	3095	CA	GLU	B	8	21.650	10.367	-11.234	1.00	21.77	6	B	C
ATOM	3096	C	GLU	B	8	22.707	11.174	-10.510	1.00	21.87	6	B	C
ATOM	3097	O	GLU	B	8	23.128	12.224	-10.985	1.00	22.06	8	B	O
ATOM	3098	CB	GLU	B	8	22.378	9.266	-12.002	1.00	21.89	6	B	C
ATOM	3099	CG	GLU	B	8	21.552	8.133	-12.523	1.00	23.64	6	B	C
ATOM	3100	CD	GLU	B	8	20.423	8.556	-13.465	1.00	23.77	6	B	C
ATOM	3101	OE1	GLU	B	8	20.742	9.309	-14.398	1.00	25.68	8	B	O
ATOM	3102	OE2	GLU	B	8	19.256	8.183	-13.249	1.00	21.58	8	B	O
ATOM	3103	N	SER	B	9	23.124	10.716	-9.343	1.00	22.14	7	B	N
ATOM	3104	CA	SER	B	9	24.078	11.417	-8.538	1.00	22.04	6	B	C
ATOM	3105	C	SER	B	9	25.351	11.783	-9.320	1.00	22.04	6	B	C
ATOM	3106	O	SER	B	9	25.836	12.909	-9.237	1.00	17.76	8	B	O
ATOM	3107	CB	SER	B	9	24.516	10.536	-7.326	1.00	22.19	6	B	C
ATOM	3108	OG	SER	B	9	25.449	11.372	-6.632	1.00	24.99	8	B	O
ATOM	3109	N	HIS	B	10	25.864	10.819	-10.076	1.00	20.38	7	B	N
ATOM	3110	CA	HIS	B	10	27.081	11.040	-10.839	1.00	21.73	6	B	C
ATOM	3111	C	HIS	B	10	26.833	11.109	-12.343	1.00	22.10	6	B	C
ATOM	3112	O	HIS	B	10	27.777	10.917	-13.088	1.00	21.67	8	B	O
ATOM	3113	CB	HIS	B	10	28.140	9.949	-10.526	1.00	22.61	6	B	C
ATOM	3114	CG	HIS	B	10	28.358	9.872	-9.023	1.00	23.71	6	B	C
ATOM	3115	ND1	HIS	B	10	28.001	8.811	-8.252	1.00	22.93	7	B	N
ATOM	3116	CD2	HIS	B	10	28.803	10.835	-8.170	1.00	23.22	6	B	C
ATOM	3117	CE1	HIS	B	10	28.277	9.095	-6.969	1.00	23.44	6	B	C
ATOM	3118	NE2	HIS	B	10	28.747	10.325	-6.912	1.00	21.85	7	B	N
ATOM	3119	N	GLY	B	11	25.602	11.372	-12.756	1.00	21.00	7	B	N
ATOM	3120	CA	GLY	B	11	25.280	11.593	-14.178	1.00	18.78	6	B	C
ATOM	3121	C	GLY	B	11	25.579	13.050	-14.498	1.00	19.86	6	B	C
ATOM	3122	O	GLY	B	11	25.991	13.796	-13.609	1.00	20.60	8	B	O
ATOM	3123	N	PRO	B	12	25.296	13.481	-15.726	1.00	21.22	7	B	N
ATOM	3124	CA	PRO	B	12	25.658	14.829	-16.159	1.00	21.67	6	B	C
ATOM	3125	C	PRO	B	12	24.953	15.947	-15.462	1.00	20.49	6	B	C
ATOM	3126	O	PRO	B	12	25.434	17.052	-15.211	1.00	19.91	8	B	O
ATOM	3127	CB	PRO	B	12	25.365	14.821	-17.664	1.00	22.05	6	B	C
ATOM	3128	CG	PRO	B	12	24.683	13.559	-18.000	1.00	23.09	6	B	C
ATOM	3129	CD	PRO	B	12	24.953	12.604	-16.857	1.00	21.81	6	B	C
ATOM	3130	N	ARG	B	13	23.623	15.699	-15.197	1.00	21.19	7	B	N
ATOM	3131	CA	ARG	B	13	22.888	16.766	-14.547	1.00	21.11	6	B	C
ATOM	3132	C	ARG	B	13	21.549	16.260	-13.993	1.00	17.02	6	B	C
ATOM	3133	O	ARG	B	13	21.159	15.140	-14.300	1.00	17.24	8	B	O
ATOM	3134	CB	ARG	B	13	22.647	18.001	-15.428	1.00	24.65	6	B	C
ATOM	3135	CG	ARG	B	13	21.858	17.930	-16.658	1.00	27.33	6	B	C
ATOM	3136	CD	ARG	B	13	21.083	19.190	-17.100	1.00	25.81	6	B	C
ATOM	3137	NE	ARG	B	13	19.800	18.714	-17.602	1.00	22.80	7	B	N
ATOM	3138	CZ	ARG	B	13	19.438	18.583	-18.879	1.00	23.92	6	B	C
ATOM	3139	NH1	ARG	B	13	20.210	18.942	-19.898	1.00	18.89	7	B	N
ATOM	3140	NH2	ARG	B	13	18.240	18.092	-19.111	1.00	21.33	7	B	N
ATOM	3141	N	LEU	B	14	20.991	17.085	-13.151	1.00	14.63	7	B	N
ATOM	3142	CA	LEU	B	14	19.667	16.786	-12.591	1.00	14.57	6	B	C
ATOM	3143	C	LEU	B	14	18.686	17.674	-13.360	1.00	18.34	6	B	C
ATOM	3144	O	LEU	B	14	19.116	18.775	-13.751	1.00	17.48	8	B	O
ATOM	3145	CB	LEU	B	14	19.637	17.165	-11.120	1.00	15.03	6	B	C
ATOM	3146	CG	LEU	B	14	20.835	16.614	-10.285	1.00	15.81	6	B	C
ATOM	3147	CD1	LEU	B	14	20.668	17.168	-8.870	1.00	15.61	6	B	C
ATOM	3148	CD2	LEU	B	14	20.893	15.098	-10.349	1.00	12.36	6	B	C
ATOM	3149	N	THR	B	15	17.427	17.258	-13.444	1.00	17.17	7	B	N
ATOM	3150	CA	THR	B	15	16.393	17.995	-14.149	1.00	16.59	6	B	C
ATOM	3151	C	THR	B	15	15.057	17.831	-13.391	1.00	18.11	6	B	C

41/188

ATOM	3152	O	THR	B	15	14.799	16.821	-12.716	1.00	16.67	8	B	O
ATOM	3153	CB	THR	B	15	16.137	17.423	-15.567	1.00	18.18	6	B	C
ATOM	3154	OG1	THR	B	15	17.408	17.414	-16.242	1.00	17.46	8	B	O
ATOM	3155	CG2	THR	B	15	15.214	18.294	-16.431	1.00	17.30	6	B	C
ATOM	3156	N	ALA	B	16	14.242	18.866	-13.468	1.00	19.48	7	B	N
ATOM	3157	CA	ALA	B	16	12.903	18.765	-12.891	1.00	20.48	6	B	C
ATOM	3158	C	ALA	B	16	11.961	19.525	-13.879	1.00	20.05	6	B	C
ATOM	3159	O	ALA	B	16	12.405	20.502	-14.461	1.00	19.68	8	B	O
ATOM	3160	CB	ALA	B	16	12.722	19.278	-11.504	1.00	21.17	6	B	C
ATOM	3161	N	ILE	B	17	10.768	18.986	-14.032	1.00	16.99	7	B	N
ATOM	3162	CA	ILE	B	17	9.709	19.686	-14.728	1.00	15.93	6	B	C
ATOM	3163	C	ILE	B	17	8.513	19.881	-13.802	1.00	16.27	6	B	C
ATOM	3164	O	ILE	B	17	7.997	18.919	-13.220	1.00	14.87	8	B	O
ATOM	3165	CB	ILE	B	17	9.254	18.903	-15.980	1.00	13.38	6	B	C
ATOM	3166	CG1	ILE	B	17	10.471	18.872	-16.981	1.00	14.28	6	B	C
ATOM	3167	CG2	ILE	B	17	8.063	19.556	-16.639	1.00	13.77	6	B	C
ATOM	3168	CD1	ILE	B	17	10.193	17.726	-18.009	1.00	15.28	6	B	C
ATOM	3169	N	ILE	B	18	8.027	21.118	-13.720	1.00	16.65	7	B	N
ATOM	3170	CA	ILE	B	18	6.794	21.345	-12.929	1.00	15.74	6	B	C
ATOM	3171	C	ILE	B	18	5.738	21.726	-13.964	1.00	16.61	6	B	C
ATOM	3172	O	ILE	B	18	5.917	22.722	-14.676	1.00	13.22	8	B	O
ATOM	3173	CB	ILE	B	18	6.954	22.481	-11.937	1.00	15.66	6	B	C
ATOM	3174	CG1	ILE	B	18	8.128	22.162	-10.988	1.00	15.84	6	B	C
ATOM	3175	CG2	ILE	B	18	5.685	22.643	-11.096	1.00	17.86	6	B	C
ATOM	3176	CD1	ILE	B	18	8.585	23.419	-10.300	1.00	14.89	6	B	C
ATOM	3177	N	GLU	B	19	4.566	21.121	-13.918	1.00	18.18	7	B	N
ATOM	3178	CA	GLU	B	19	3.454	21.406	-14.797	1.00	16.42	6	B	C
ATOM	3179	C	GLU	B	19	2.295	21.935	-13.960	1.00	18.11	6	B	C
ATOM	3180	O	GLU	B	19	1.946	21.296	-12.963	1.00	18.14	8	B	O
ATOM	3181	CB	GLU	B	19	3.006	20.107	-15.502	1.00	15.51	6	B	C
ATOM	3182	CG	GLU	B	19	2.110	20.268	-16.706	1.00	16.18	6	B	C
ATOM	3183	CD	GLU	B	19	0.681	20.662	-16.405	1.00	18.37	6	B	C
ATOM	3184	OE1	GLU	B	19	0.046	19.965	-15.573	1.00	21.46	8	B	O
ATOM	3185	OE2	GLU	B	19	0.196	21.662	-16.989	1.00	18.85	8	B	O
ATOM	3186	N	GLY	B	20	1.732	23.090	-14.335	1.00	19.22	7	B	N
ATOM	3187	CA	GLY	B	20	0.559	23.592	-13.609	1.00	18.11	6	B	C
ATOM	3188	C	GLY	B	20	0.784	24.788	-12.726	1.00	20.97	6	B	C
ATOM	3189	O	GLY	B	20	-0.090	25.029	-11.897	1.00	18.88	8	B	O
ATOM	3190	N	ILE	B	21	1.936	25.467	-12.756	1.00	20.67	7	B	N
ATOM	3191	CA	ILE	B	21	2.095	26.675	-11.922	1.00	18.77	6	B	C
ATOM	3192	C	ILE	B	21	1.340	27.779	-12.646	1.00	19.25	6	B	C
ATOM	3193	O	ILE	B	21	1.291	27.840	-13.884	1.00	20.34	8	B	O
ATOM	3194	CB	ILE	B	21	3.572	27.040	-11.830	1.00	20.73	6	B	C
ATOM	3195	CG1	ILE	B	21	4.308	25.911	-11.062	1.00	19.54	6	B	C
ATOM	3196	CG2	ILE	B	21	3.889	28.383	-11.206	1.00	16.51	6	B	C
ATOM	3197	CD1	ILE	B	21	4.097	25.961	-9.574	1.00	22.74	6	B	C
ATOM	3198	N	PRO	B	22	0.607	28.617	-11.956	1.00	20.55	7	B	N
ATOM	3199	CA	PRO	B	22	-0.077	29.713	-12.573	1.00	19.99	6	B	C
ATOM	3200	C	PRO	B	22	0.887	30.628	-13.331	1.00	19.15	6	B	C
ATOM	3201	O	PRO	B	22	2.024	30.842	-12.931	1.00	18.98	8	B	O
ATOM	3202	CB	PRO	B	22	-0.721	30.522	-11.457	1.00	20.05	6	B	C
ATOM	3203	CG	PRO	B	22	-0.405	29.811	-10.215	1.00	22.26	6	B	C
ATOM	3204	CD	PRO	B	22	0.551	28.679	-10.482	1.00	22.58	6	B	C
ATOM	3205	N	ALA	B	23	0.299	31.208	-14.363	1.00	18.39	7	B	N
ATOM	3206	CA	ALA	B	23	0.923	32.272	-15.113	1.00	19.54	6	B	C
ATOM	3207	C	ALA	B	23	1.014	33.516	-14.231	1.00	19.43	6	B	C
ATOM	3208	O	ALA	B	23	0.114	33.735	-13.392	1.00	19.63	8	B	O
ATOM	3209	CB	ALA	B	23	0.025	32.546	-16.330	1.00	16.78	6	B	C
ATOM	3210	N	GLY	B	24	2.036	34.369	-14.449	1.00	18.05	7	B	N
ATOM	3211	CA	GLY	B	24	2.148	35.600	-13.761	1.00	18.80	6	B	C
ATOM	3212	C	GLY	B	24	2.968	35.643	-12.493	1.00	21.27	6	B	C
ATOM	3213	O	GLY	B	24	3.136	36.708	-11.922	1.00	22.17	8	B	O
ATOM	3214	N	LEU	B	25	3.546	34.534	-12.056	1.00	20.09	7	B	N
ATOM	3215	CA	LEU	B	25	4.332	34.532	-10.833	1.00	19.76	6	B	C
ATOM	3216	C	LEU	B	25	5.772	34.978	-11.092	1.00	19.53	6	B	C
ATOM	3217	O	LEU	B	25	6.475	34.358	-11.893	1.00	19.10	8	B	O
ATOM	3218	CB	LEU	B	25	4.351	33.072	-10.343	1.00	20.26	6	B	C
ATOM	3219	CG	LEU	B	25	5.197	32.817	-9.093	1.00	22.10	6	B	C
ATOM	3220	CD1	LEU	B	25	4.491	33.400	-7.845	1.00	20.16	6	B	C
ATOM	3221	CD2	LEU	B	25	5.427	31.303	-8.921	1.00	19.35	6	B	C
ATOM	3222	N	PRO	B	26	6.206	36.035	-10.442	1.00	20.81	7	B	N
ATOM	3223	CA	PRO	B	26	7.583	36.502	-10.567	1.00	23.14	6	B	C
ATOM	3224	C	PRO	B	26	8.458	35.339	-10.098	1.00	22.12	6	B	C
ATOM	3225	O	PRO	B	26	8.166	34.713	-9.078	1.00	22.15	8	B	O
ATOM	3226	CB	PRO	B	26	7.688	37.728	-9.652	1.00	22.11	6	B	C
ATOM	3227	CG	PRO	B	26	6.239	38.187	-9.645	1.00	23.54	6	B	C
ATOM	3228	CD	PRO	B	26	5.440	36.876	-9.496	1.00	21.55	6	B	C
ATOM	3229	N	LEU	B	27	9.508	35.040	-10.848	1.00	21.65	7	B	N
ATOM	3230	CA	LEU	B	27	10.402	33.950	-10.464	1.00	19.49	6	B	C

42/188

ATOM	3231	C	LEU	B	27	11.784	34.170	-11.091	1.00	19.86	6	B	C
ATOM	3232	O	LEU	B	27	11.828	34.366	-12.293	1.00	17.47	8	B	O
ATOM	3233	CB	LEU	B	27	9.817	32.639	-11.008	1.00	19.22	6	B	C
ATOM	3234	CG	LEU	B	27	10.518	31.347	-10.592	1.00	21.52	6	B	C
ATOM	3235	CD1	LEU	B	27	10.461	31.115	-9.099	1.00	23.19	6	B	C
ATOM	3236	CD2	LEU	B	27	9.826	30.177	-11.313	1.00	22.27	6	B	C
ATOM	3237	N	THR	B	28	12.845	34.091	-10.299	1.00	20.72	7	B	N
ATOM	3238	CA	THR	B	28	14.171	34.227	-10.896	1.00	24.02	6	B	C
ATOM	3239	C	THR	B	28	15.046	33.053	-10.467	1.00	23.55	6	B	C
ATOM	3240	O	THR	B	28	14.707	32.307	-9.552	1.00	21.14	8	B	O
ATOM	3241	CB	THR	B	28	14.830	35.511	-10.334	1.00	24.66	6	B	C
ATOM	3242	OG1	THR	B	28	14.832	35.282	-8.943	1.00	24.84	8	B	O
ATOM	3243	CG2	THR	B	28	14.008	36.769	-10.610	1.00	25.64	6	B	C
ATOM	3244	N	ALA	B	29	16.189	32.929	-11.102	1.00	23.97	7	B	N
ATOM	3245	CA	ALA	B	29	17.148	31.904	-10.721	1.00	24.76	6	B	C
ATOM	3246	C	ALA	B	29	17.603	32.101	-9.256	1.00	23.48	6	B	C
ATOM	3247	O	ALA	B	29	17.800	31.117	-8.539	1.00	20.62	8	B	O
ATOM	3248	CB	ALA	B	29	18.358	32.025	-11.654	1.00	22.25	6	B	C
ATOM	3249	N	GLU	B	30	17.768	33.325	-8.783	1.00	22.06	7	B	N
ATOM	3250	CA	GLU	B	30	18.121	33.562	-7.388	1.00	24.81	6	B	C
ATOM	3251	C	GLU	B	30	17.055	33.080	-6.418	1.00	24.22	6	B	C
ATOM	3252	O	GLU	B	30	17.393	32.586	-5.350	1.00	22.36	8	B	O
ATOM	3253	CB	GLU	B	30	18.411	35.061	-7.128	1.00	29.15	6	B	C
ATOM	3254	CG	GLU	B	30	18.673	35.346	-5.647	1.00	31.82	6	B	C
ATOM	3255	CD	GLU	B	30	19.884	34.672	-5.048	1.00	34.97	6	B	C
ATOM	3256	OE1	GLU	B	30	20.624	33.923	-5.729	1.00	33.49	8	B	O
ATOM	3257	OE2	GLU	B	30	20.181	34.899	-3.834	1.00	37.24	8	B	O
ATOM	3258	N	ASP	B	31	15.771	33.125	-6.782	1.00	23.92	7	B	N
ATOM	3259	CA	ASP	B	31	14.738	32.595	-5.875	1.00	24.04	6	B	C
ATOM	3260	C	ASP	B	31	15.057	31.114	-5.617	1.00	24.63	6	B	C
ATOM	3261	O	ASP	B	31	14.883	30.596	-4.507	1.00	27.47	8	B	O
ATOM	3262	CB	ASP	B	31	13.362	32.703	-6.540	1.00	22.33	6	B	C
ATOM	3263	CG	ASP	B	31	12.849	34.123	-6.697	1.00	23.58	6	B	C
ATOM	3264	OD1	ASP	B	31	13.120	35.006	-5.857	1.00	24.36	8	B	O
ATOM	3265	OD2	ASP	B	31	12.138	34.403	-7.669	1.00	23.10	8	B	O
ATOM	3266	N	ILE	B	32	15.559	30.425	-6.649	1.00	21.92	7	B	N
ATOM	3267	CA	ILE	B	32	15.880	29.011	-6.456	1.00	20.54	6	B	C
ATOM	3268	C	ILE	B	32	17.202	28.797	-5.741	1.00	20.96	6	B	C
ATOM	3269	O	ILE	B	32	17.320	27.951	-4.842	1.00	19.51	8	B	O
ATOM	3270	CB	ILE	B	32	15.989	28.286	-7.811	1.00	20.30	6	B	C
ATOM	3271	CG1	ILE	B	32	14.838	28.586	-8.758	1.00	20.51	6	B	C
ATOM	3272	CG2	ILE	B	32	16.182	26.782	-7.570	1.00	20.33	6	B	C
ATOM	3273	CD1	ILE	B	32	13.467	28.226	-8.268	1.00	19.26	6	B	C
ATOM	3274	N	ASN	B	33	18.221	29.481	-6.237	1.00	21.18	7	B	N
ATOM	3275	CA	ASN	B	33	19.593	29.317	-5.757	1.00	22.83	6	B	C
ATOM	3276	C	ASN	B	33	19.826	29.558	-4.276	1.00	24.08	6	B	C
ATOM	3277	O	ASN	B	33	20.640	28.850	-3.666	1.00	21.91	8	B	O
ATOM	3278	CB	ASN	B	33	20.507	30.289	-6.526	1.00	22.72	6	B	C
ATOM	3279	CG	ASN	B	33	20.587	29.927	-7.982	1.00	23.19	6	B	C
ATOM	3280	OD1	ASN	B	33	20.206	28.840	-8.430	1.00	23.53	8	B	O
ATOM	3281	ND2	ASN	B	33	21.138	30.815	-8.821	1.00	25.75	7	B	N
ATOM	3282	N	GLU	B	34	19.096	30.508	-3.710	1.00	24.24	7	B	N
ATOM	3283	CA	GLU	B	34	19.175	30.702	-2.268	1.00	28.04	6	B	C
ATOM	3284	C	GLU	B	34	18.869	29.412	-1.485	1.00	26.45	6	B	C
ATOM	3285	O	GLU	B	34	19.622	29.089	-0.567	1.00	23.36	8	B	O
ATOM	3286	CB	GLU	B	34	18.165	31.772	-1.794	1.00	31.55	6	B	C
ATOM	3287	CG	AGLU	B	34	18.463	32.116	-0.335	0.50	33.67	6	B	C
ATOM	3288	CG	BGLU	B	34	18.298	33.098	-2.500	0.50	34.78	6	B	C
ATOM	3289	CD	AGLU	B	34	17.644	33.265	0.207	0.50	35.97	6	B	C
ATOM	3290	CD	BGLU	B	34	17.304	34.196	-2.231	0.50	37.18	6	B	C
ATOM	3291	OE1	AGLU	B	34	16.984	33.971	-0.584	0.50	36.50	8	B	O
ATOM	3292	OE1	BGLU	B	34	16.351	34.065	-1.441	0.50	38.37	8	B	O
ATOM	3293	OE2	AGLU	B	34	17.695	33.469	1.445	0.50	36.09	8	B	O
ATOM	3294	OE2	BGLU	B	34	17.423	35.297	-2.819	0.50	38.23	8	B	O
ATOM	3295	N	ASP	B	35	17.897	28.617	-1.955	1.00	23.27	7	B	N
ATOM	3296	CA	ASP	B	35	17.572	27.382	-1.227	1.00	21.30	6	B	C
ATOM	3297	C	ASP	B	35	18.525	26.263	-1.604	1.00	20.19	6	B	C
ATOM	3298	O	ASP	B	35	18.918	25.441	-0.757	1.00	20.75	8	B	O
ATOM	3299	CB	ASP	B	35	16.091	27.019	-1.399	1.00	22.26	6	B	C
ATOM	3300	CG	ASP	B	35	15.091	27.792	-0.570	1.00	24.54	6	B	C
ATOM	3301	OD1	ASP	B	35	15.469	28.698	0.223	1.00	25.36	8	B	O
ATOM	3302	OD2	ASP	B	35	13.857	27.544	-0.676	1.00	23.92	8	B	O
ATOM	3303	N	LEU	B	36	19.023	26.249	-2.851	1.00	18.28	7	B	N
ATOM	3304	CA	LEU	B	36	20.036	25.291	-3.245	1.00	22.25	6	B	C
ATOM	3305	C	LEU	B	36	21.273	25.500	-2.360	1.00	23.95	6	B	C
ATOM	3306	O	LEU	B	36	21.960	24.540	-2.021	1.00	23.96	8	B	O
ATOM	3307	CB	LEU	B	36	20.461	25.401	-4.731	1.00	17.12	6	B	C
ATOM	3308	CG	LEU	B	36	19.217	25.190	-5.660	1.00	17.79	6	B	C
ATOM	3309	CD1	LEU	B	36	19.671	25.362	-7.110	1.00	17.11	6	B	C

43/188

ATOM	3310	CD2	LEU	B	36	18.625	23.794	-5.396	1.00	17.27	6	B	C
ATOM	3311	N	ARG	B	37	21.617	26.762	-2.108	1.00	25.79	7	B	N
ATOM	3312	CA	ARG	B	37	22.771	26.993	-1.226	1.00	26.20	6	B	C
ATOM	3313	C	ARG	B	37	22.522	26.491	0.187	1.00	26.88	6	B	C
ATOM	3314	O	ARG	B	37	23.387	25.764	0.731	1.00	25.94	8	B	O
ATOM	3315	CB	ARG	B	37	23.163	28.484	-1.197	1.00	29.45	6	B	C
ATOM	3316	CG	AARG	B	37	24.059	28.806	-2.400	0.50	32.22	6	B	C
ATOM	3317	CG	BARG	B	37	23.633	29.017	-2.549	0.50	29.84	6	B	C
ATOM	3318	CD	AARG	B	37	24.680	30.196	-2.309	0.50	34.36	6	B	C
ATOM	3319	CD	BARG	B	37	24.313	30.378	-2.381	0.50	30.50	6	B	C
ATOM	3320	NE	AARG	B	37	23.697	31.233	-2.628	0.50	36.08	7	B	N
ATOM	3321	NE	BARG	B	37	23.388	31.417	-1.944	0.50	29.13	7	B	N
ATOM	3322	CZ	AARG	B	37	23.313	31.585	-3.850	0.50	36.68	6	B	C
ATOM	3323	CZ	BARG	B	37	22.569	32.144	-2.689	0.50	27.88	6	B	C
ATOM	3324	NH2AARG	B	37	22.402	32.543	-3.962	0.50	36.44	7	B	N	
ATOM	3325	NH2BARG	B	37	22.494	31.968	-4.001	0.50	27.46	7	B	N	
ATOM	3326	NH1AARG	B	37	23.843	31.023	-4.930	0.50	36.78	7	B	N	
ATOM	3327	NH1BARG	B	37	21.785	33.039	-2.105	0.50	26.99	7	B	N	
ATOM	3328	N	ARG	B	38	21.336	26.792	0.743	1.00	24.57	7	B	N
ATOM	3329	CA	ARG	B	38	21.059	26.306	2.079	1.00	25.12	6	B	C
ATOM	3330	C	ARG	B	38	21.202	24.800	2.152	1.00	22.41	6	B	C
ATOM	3331	O	ARG	B	38	21.600	24.312	3.198	1.00	21.67	8	B	O
ATOM	3332	CB	ARG	B	38	19.671	26.690	2.606	1.00	25.59	6	B	C
ATOM	3333	CG	ARG	B	38	19.577	28.223	2.699	1.00	26.54	6	B	C
ATOM	3334	CD	ARG	B	38	18.116	28.549	2.976	1.00	28.02	6	B	C
ATOM	3335	NE	ARG	B	38	17.610	28.026	4.237	1.00	28.64	7	B	N
ATOM	3336	CZ	ARG	B	38	16.312	27.895	4.514	1.00	30.84	6	B	C
ATOM	3337	NH1	ARG	B	38	15.892	27.439	5.689	1.00	30.25	7	B	N
ATOM	3338	NH2	ARG	B	38	15.384	28.182	3.605	1.00	28.71	7	B	N
ATOM	3339	N	ARG	B	39	20.742	24.126	1.121	1.00	20.88	7	B	N
ATOM	3340	CA	ARG	B	39	20.718	22.675	1.140	1.00	20.86	6	B	C
ATOM	3341	C	ARG	B	39	22.151	22.126	1.141	1.00	21.43	6	B	C
ATOM	3342	O	ARG	B	39	22.278	20.985	1.545	1.00	19.87	8	B	O
ATOM	3343	CB	ARG	B	39	20.009	22.103	-0.113	1.00	19.56	6	B	C
ATOM	3344	CG	ARG	B	39	19.591	20.624	0.006	1.00	20.51	6	B	C
ATOM	3345	CD	ARG	B	39	19.256	20.079	-1.416	1.00	20.42	6	B	C
ATOM	3346	NE	ARG	B	39	20.585	20.082	-2.093	1.00	21.48	7	B	N
ATOM	3347	CZ	ARG	B	39	21.440	19.069	-2.073	1.00	23.68	6	B	C
ATOM	3348	NH1	ARG	B	39	21.088	17.933	-1.472	1.00	21.78	7	B	N
ATOM	3349	NH2	ARG	B	39	22.627	19.188	-2.653	1.00	22.65	7	B	N
ATOM	3350	N	GLN	B	40	23.149	22.825	0.577	1.00	21.65	7	B	N
ATOM	3351	CA	GLN	B	40	24.480	22.247	0.532	1.00	24.04	6	B	C
ATOM	3352	C	GLN	B	40	25.204	22.420	1.871	1.00	25.08	6	B	C
ATOM	3353	O	GLN	B	40	26.310	21.942	2.032	1.00	25.02	8	B	O
ATOM	3354	CB	GLN	B	40	25.395	22.922	-0.532	1.00	25.30	6	B	C
ATOM	3355	CG	GLN	B	40	24.872	22.669	-1.955	1.00	25.26	6	B	C
ATOM	3356	CD	GLN	B	40	25.947	22.954	-2.993	1.00	27.38	6	B	C
ATOM	3357	OE1	GLN	B	40	25.611	23.854	-3.793	1.00	26.62	8	B	O
ATOM	3358	NE2	GLN	B	40	27.059	22.226	-3.038	1.00	27.88	7	B	N
ATOM	3359	N	GLY	B	41	24.627	23.169	2.796	1.00	24.60	7	B	N
ATOM	3360	CA	GLY	B	41	25.268	23.524	4.039	1.00	26.05	6	B	C
ATOM	3361	C	GLY	B	41	24.965	22.622	5.217	1.00	25.33	6	B	C
ATOM	3362	O	GLY	B	41	24.364	21.567	5.086	1.00	25.83	8	B	O
ATOM	3363	N	GLY	B	42	25.430	23.042	6.386	1.00	27.33	7	B	N
ATOM	3364	CA	GLY	B	42	25.267	22.285	7.626	1.00	26.64	6	B	C
ATOM	3365	C	GLY	B	42	26.632	21.688	8.007	1.00	27.68	6	B	C
ATOM	3366	O	GLY	B	42	27.252	20.907	7.264	1.00	26.46	8	B	O
ATOM	3367	N	TYR	B	43	27.019	22.040	9.243	1.00	25.77	7	B	N
ATOM	3368	CA	TYR	B	43	28.265	21.516	9.794	1.00	27.13	6	B	C
ATOM	3369	C	TYR	B	43	28.218	20.002	9.667	1.00	26.63	6	B	C
ATOM	3370	O	TYR	B	43	27.187	19.406	9.954	1.00	27.98	8	B	O
ATOM	3371	CB	TYR	B	43	28.452	21.955	11.247	1.00	28.44	6	B	C
ATOM	3372	CG	TYR	B	43	29.812	21.486	11.760	1.00	30.33	6	B	C
ATOM	3373	CD1	TYR	B	43	30.912	22.318	11.566	1.00	31.53	6	B	C
ATOM	3374	CD2	TYR	B	43	29.994	20.281	12.394	1.00	30.18	6	B	C
ATOM	3375	CE1	TYR	B	43	32.167	21.929	11.995	1.00	32.10	6	B	C
ATOM	3376	CE2	TYR	B	43	31.254	19.896	12.836	1.00	32.46	6	B	C
ATOM	3377	CZ	TYR	B	43	32.344	20.715	12.624	1.00	32.38	6	B	C
ATOM	3378	OH	TYR	B	43	33.606	20.365	13.052	1.00	31.49	8	B	O
ATOM	3379	N	GLY	B	44	29.293	19.370	9.222	1.00	27.44	7	B	N
ATOM	3380	CA	GLY	B	44	29.253	17.912	9.042	1.00	27.67	6	B	C
ATOM	3381	C	GLY	B	44	29.160	17.497	7.580	1.00	27.46	6	B	C
ATOM	3382	O	GLY	B	44	29.491	16.335	7.290	1.00	27.66	8	B	O
ATOM	3383	N	ARG	B	45	28.798	18.384	6.650	1.00	24.73	7	B	N
ATOM	3384	CA	ARG	B	45	28.819	17.973	5.245	1.00	27.39	6	B	C
ATOM	3385	C	ARG	B	45	30.196	18.303	4.672	1.00	30.39	6	B	C
ATOM	3386	O	ARG	B	45	30.794	19.300	5.083	1.00	31.87	8	B	O
ATOM	3387	CB	ARG	B	45	27.727	18.646	4.407	1.00	26.27	6	B	C
ATOM	3388	CG	ARG	B	45	26.330	18.230	4.865	1.00	26.09	6	B	C

44/188

ATOM	3389	CD	ARG	B	45	25.279	18.452	3.745	1.00	27.19	6	B	C
ATOM	3390	NE	ARG	B	45	25.337	17.238	2.938	1.00	25.70	7	B	N
ATOM	3391	CZ	ARG	B	45	24.614	17.008	1.837	1.00	25.00	6	B	C
ATOM	3392	NH1	ARG	B	45	23.737	17.917	1.446	1.00	23.70	7	B	N
ATOM	3393	NH2	ARG	B	45	24.794	15.834	1.222	1.00	21.40	7	B	N
ATOM	3394	N	GLY	B	46	30.714	17.507	3.761	1.00	30.39	7	B	N
ATOM	3395	CA	GLY	B	46	32.015	17.851	3.150	1.00	32.49	6	B	C
ATOM	3396	C	GLY	B	46	31.990	17.285	1.730	1.00	34.02	6	B	C
ATOM	3397	O	GLY	B	46	30.913	17.311	1.103	1.00	36.61	8	B	O
ATOM	3398	N	GLY	B	47	33.050	16.585	1.347	1.00	33.16	7	B	N
ATOM	3399	CA	GLY	B	47	33.206	15.877	0.110	1.00	31.29	6	B	C
ATOM	3400	C	GLY	B	47	32.571	16.551	-1.102	1.00	31.40	6	B	C
ATOM	3401	O	GLY	B	47	32.976	17.597	-1.601	1.00	29.00	8	B	O
ATOM	3402	N	ARG	B	48	31.514	15.899	-1.597	1.00	31.64	7	B	N
ATOM	3403	CA	ARG	B	48	30.781	16.431	-2.749	1.00	30.63	6	B	C
ATOM	3404	C	ARG	B	48	30.389	17.894	-2.550	1.00	29.86	6	B	C
ATOM	3405	O	ARG	B	48	30.291	18.647	-3.521	1.00	28.68	8	B	O
ATOM	3406	CB	ARG	B	48	29.538	15.582	-3.008	1.00	30.95	6	B	C
ATOM	3407	CG	ARG	B	48	28.836	15.904	-4.323	1.00	32.15	6	B	C
ATOM	3408	CD	ARG	B	48	29.481	15.150	-5.487	1.00	32.86	6	B	C
ATOM	3409	NE	ARG	B	48	28.679	15.378	-6.704	1.00	33.56	7	B	N
ATOM	3410	CZ	ARG	B	48	27.653	14.602	-7.068	1.00	32.58	6	B	C
ATOM	3411	NH1	ARG	B	48	27.341	13.532	-6.352	1.00	31.56	7	B	N
ATOM	3412	NH2	ARG	B	48	26.926	14.956	-8.131	1.00	32.02	7	B	N
ATOM	3413	N	MET	B	49	30.064	18.292	-1.327	1.00	29.08	7	B	N
ATOM	3414	CA	MET	B	49	29.528	19.640	-1.116	1.00	30.01	6	B	C
ATOM	3415	C	MET	B	49	30.597	20.706	-1.360	1.00	32.92	6	B	C
ATOM	3416	O	MET	B	49	30.321	21.915	-1.331	1.00	32.67	8	B	O
ATOM	3417	CB	MET	B	49	28.903	19.793	0.267	1.00	30.67	6	B	C
ATOM	3418	CG	MET	B	49	27.725	18.846	0.507	1.00	29.73	6	B	C
ATOM	3419	SE	MET	B	49	26.354	19.390	-0.802	1.00	47.47	34	B	SE
ATOM	3420	CE2	MET	B	49	26.540	18.006	-2.363	1.00	30.04	6	B	C
ATOM	3421	N	GLY	B	50	31.818	20.225	-1.557	1.00	32.85	7	B	N
ATOM	3422	CA	GLY	B	50	32.969	21.071	-1.848	1.00	34.17	6	B	C
ATOM	3423	C	GLY	B	50	33.194	21.120	-3.365	1.00	33.48	6	B	C
ATOM	3424	O	GLY	B	50	33.842	22.031	-3.873	1.00	35.69	8	B	O
ATOM	3425	N	ILE	B	51	32.736	20.123	-4.078	1.00	31.83	7	B	N
ATOM	3426	CA	ILE	B	51	32.866	20.031	-5.539	1.00	30.79	6	B	C
ATOM	3427	C	ILE	B	51	31.697	20.708	-6.243	1.00	30.72	6	B	C
ATOM	3428	O	ILE	B	51	31.915	21.443	-7.209	1.00	29.84	8	B	O
ATOM	3429	CB	ILE	B	51	32.951	18.553	-5.953	1.00	31.89	6	B	C
ATOM	3430	CG1	ILE	B	51	34.228	17.916	-5.375	1.00	31.18	6	B	C
ATOM	3431	CG2	ILE	B	51	32.875	18.357	-7.468	1.00	29.54	6	B	C
ATOM	3432	CD1	ILE	B	51	34.403	16.460	-5.770	1.00	32.23	6	B	C
ATOM	3433	N	GLU	B	52	30.474	20.583	-5.739	1.00	28.27	7	B	N
ATOM	3434	CA	GLU	B	52	29.321	21.190	-6.394	1.00	27.34	6	B	C
ATOM	3435	C	GLU	B	52	29.042	22.590	-5.890	1.00	27.36	6	B	C
ATOM	3436	O	GLU	B	52	29.226	22.928	-4.722	1.00	27.29	8	B	O
ATOM	3437	CB	GLU	B	52	28.077	20.318	-6.147	1.00	28.40	6	B	C
ATOM	3438	CG	GLU	B	52	28.251	18.867	-6.560	1.00	27.68	6	B	C
ATOM	3439	CD	GLU	B	52	28.443	18.693	-8.053	1.00	28.40	6	B	C
ATOM	3440	OE1	GLU	B	52	28.225	19.693	-8.762	1.00	27.85	8	B	O
ATOM	3441	OE2	GLU	B	52	28.815	17.582	-8.488	1.00	26.82	8	B	O
ATOM	3442	N	ASN	B	53	28.590	23.450	-6.767	1.00	25.49	7	B	N
ATOM	3443	CA	ASN	B	53	28.112	24.790	-6.438	1.00	29.05	6	B	C
ATOM	3444	C	ASN	B	53	26.743	24.837	-7.142	1.00	27.62	6	B	C
ATOM	3445	O	ASN	B	53	26.707	25.199	-8.320	1.00	23.26	8	B	O
ATOM	3446	CB	ASN	B	53	29.085	25.863	-6.942	1.00	32.74	6	B	C
ATOM	3447	CG	ASN	B	53	28.563	27.250	-6.636	1.00	36.89	6	B	C
ATOM	3448	OD1	ASN	B	53	27.548	27.360	-5.965	1.00	39.07	8	B	O
ATOM	3449	ND2	ASN	B	53	29.182	28.352	-7.077	1.00	40.21	7	B	N
ATOM	3450	N	ASP	B	54	25.709	24.374	-6.449	1.00	23.20	7	B	N
ATOM	3451	CA	ASP	B	54	24.417	24.215	-7.103	1.00	23.63	6	B	C
ATOM	3452	C	ASP	B	54	23.735	25.522	-7.475	1.00	22.88	6	B	C
ATOM	3453	O	ASP	B	54	23.351	26.337	-6.638	1.00	24.25	8	B	O
ATOM	3454	CB	ASP	B	54	23.482	23.310	-6.277	1.00	22.72	6	B	C
ATOM	3455	CG	ASP	B	54	24.007	21.890	-6.145	1.00	23.54	6	B	C
ATOM	3456	OD1	ASP	B	54	24.772	21.397	-7.011	1.00	22.31	8	B	O
ATOM	3457	OD2	ASP	B	54	23.630	21.144	-5.204	1.00	23.72	8	B	O
ATOM	3458	N	GLN	B	55	23.533	25.672	-8.792	1.00	20.35	7	B	N
ATOM	3459	CA	GLN	B	55	22.719	26.778	-9.290	1.00	22.71	6	B	C
ATOM	3460	C	GLN	B	55	21.831	26.317	-10.440	1.00	22.56	6	B	C
ATOM	3461	O	GLN	B	55	22.167	25.368	-11.182	1.00	22.62	8	B	O
ATOM	3462	CB	GLN	B	55	23.522	28.000	-9.638	1.00	28.30	6	B	C
ATOM	3463	CG	GLN	B	55	24.810	27.842	-10.371	1.00	33.88	6	B	C
ATOM	3464	CD	GLN	B	55	25.719	29.056	-10.114	1.00	38.59	6	B	C
ATOM	3465	OE1	GLN	B	55	26.505	29.361	-11.003	1.00	40.25	8	B	O
ATOM	3466	NE2	GLN	B	55	25.598	29.722	-8.963	1.00	40.01	7	B	N
ATOM	3467	N	VAL	B	56	20.674	26.977	-10.517	1.00	21.99	7	B	N

45/188

ATOM	3468	CA	VAL	B	56	19.707	26.518	-11.508	1.00	21.78	6	B	C
ATOM	3469	C	VAL	B	56	19.866	27.182	-12.859	1.00	22.28	6	B	C
ATOM	3470	O	VAL	B	56	20.218	28.362	-12.976	1.00	19.80	8	B	O
ATOM	3471	CB	VAL	B	56	18.265	26.762	-10.976	1.00	21.88	6	B	C
ATOM	3472	CG1	VAL	B	56	17.835	28.206	-11.140	1.00	21.73	6	B	C
ATOM	3473	CG2	VAL	B	56	17.229	25.863	-11.651	1.00	18.28	6	B	C
ATOM	3474	N	VAL	B	57	19.395	26.457	-13.855	1.00	20.25	7	B	N
ATOM	3475	CA	VAL	B	57	19.176	26.963	-15.192	1.00	19.40	6	B	C
ATOM	3476	C	VAL	B	57	17.721	26.682	-15.588	1.00	20.25	6	B	C
ATOM	3477	O	VAL	B	57	17.328	25.513	-15.666	1.00	18.58	8	B	O
ATOM	3478	CB	VAL	B	57	20.131	26.303	-16.190	1.00	21.35	6	B	C
ATOM	3479	CG1	VAL	B	57	19.836	26.746	-17.625	1.00	18.62	6	B	C
ATOM	3480	CG2	VAL	B	57	21.632	26.621	-15.843	1.00	20.51	6	B	C
ATOM	3481	N	PHE	B	58	16.977	27.706	-15.983	1.00	19.71	7	B	N
ATOM	3482	CA	PHE	B	58	15.612	27.587	-16.468	1.00	20.89	6	B	C
ATOM	3483	C	PHE	B	58	15.616	27.357	-17.975	1.00	20.92	6	B	C
ATOM	3484	O	PHE	B	58	16.398	28.065	-18.582	1.00	21.41	8	B	O
ATOM	3485	CB	PHE	B	58	14.828	28.901	-16.242	1.00	22.25	6	B	C
ATOM	3486	CG	PHE	B	58	14.446	29.115	-14.808	1.00	23.41	6	B	C
ATOM	3487	CD1	PHE	B	58	14.808	30.266	-14.132	1.00	25.50	6	B	C
ATOM	3488	CD2	PHE	B	58	13.647	28.173	-14.159	1.00	23.89	6	B	C
ATOM	3489	CE1	PHE	B	58	14.426	30.490	-12.828	1.00	23.89	6	B	C
ATOM	3490	CE2	PHE	B	58	13.287	28.365	-12.844	1.00	24.95	6	B	C
ATOM	3491	CZ	PHE	B	58	13.680	29.517	-12.186	1.00	24.21	6	B	C
ATOM	3492	N	THR	B	59	14.971	26.371	-18.561	1.00	19.71	7	B	N
ATOM	3493	CA	THR	B	59	14.931	26.197	-19.981	1.00	19.78	6	B	C
ATOM	3494	C	THR	B	59	13.492	26.229	-20.495	1.00	20.35	6	B	C
ATOM	3495	O	THR	B	59	13.331	26.116	-21.714	1.00	20.70	8	B	O
ATOM	3496	CB	THR	B	59	15.570	24.926	-20.560	1.00	20.48	6	B	C
ATOM	3497	OG1	THR	B	59	15.087	23.763	-19.888	1.00	18.26	8	B	O
ATOM	3498	CG2	THR	B	59	17.080	25.011	-20.389	1.00	21.26	6	B	C
ATOM	3499	N	SER	B	60	12.496	26.415	-19.600	1.00	18.33	7	B	N
ATOM	3500	CA	SER	B	60	11.157	26.561	-20.185	1.00	19.92	6	B	C
ATOM	3501	C	SER	B	60	10.210	27.106	-19.108	1.00	21.01	6	B	C
ATOM	3502	O	SER	B	60	10.586	27.004	-17.925	1.00	20.48	8	B	O
ATOM	3503	CB	SER	B	60	10.612	25.176	-20.621	1.00	22.21	6	B	C
ATOM	3504	OG	SER	B	60	10.166	24.447	-19.484	1.00	19.19	8	B	O
ATOM	3505	N	GLY	B	61	9.084	27.631	-19.515	1.00	17.22	7	B	N
ATOM	3506	CA	GLY	B	61	8.042	28.156	-18.696	1.00	15.80	6	B	C
ATOM	3507	C	GLY	B	61	8.274	29.460	-17.958	1.00	17.28	6	B	C
ATOM	3508	O	GLY	B	61	7.414	29.862	-17.154	1.00	16.76	8	B	O
ATOM	3509	N	VAL	B	62	9.416	30.095	-18.117	1.00	18.57	7	B	N
ATOM	3510	CA	VAL	B	62	9.739	31.340	-17.415	1.00	17.64	6	B	C
ATOM	3511	C	VAL	B	62	10.133	32.354	-18.496	1.00	19.76	6	B	C
ATOM	3512	O	VAL	B	62	10.988	32.000	-19.337	1.00	18.02	8	B	O
ATOM	3513	CB	VAL	B	62	10.864	31.177	-16.406	1.00	19.47	6	B	C
ATOM	3514	CG1	VAL	B	62	11.028	32.420	-15.566	1.00	21.15	6	B	C
ATOM	3515	CG2	VAL	B	62	10.607	29.984	-15.451	1.00	20.80	6	B	C
ATOM	3516	N	ARG	B	63	9.537	33.543	-18.473	1.00	16.64	7	B	N
ATOM	3517	CA	ARG	B	63	9.928	34.503	-19.533	1.00	20.86	6	B	C
ATOM	3518	C	ARG	B	63	10.049	35.903	-18.938	1.00	20.99	6	B	C
ATOM	3519	O	ARG	B	63	9.122	36.285	-18.224	1.00	20.79	8	B	O
ATOM	3520	CB	ARG	B	63	8.801	34.550	-20.607	1.00	20.94	6	B	C
ATOM	3521	CG	ARG	B	63	9.139	35.384	-21.818	1.00	22.62	6	B	C
ATOM	3522	CD	ARG	B	63	8.113	35.428	-22.962	1.00	23.72	6	B	C
ATOM	3523	NE	ARG	B	63	8.632	36.398	-23.961	1.00	22.77	7	B	N
ATOM	3524	CZ	ARG	B	63	7.861	37.175	-24.731	1.00	23.25	6	B	C
ATOM	3525	NH1	ARG	B	63	6.525	37.097	-24.653	1.00	18.96	7	B	N
ATOM	3526	NH2	ARG	B	63	8.472	38.015	-25.598	1.00	20.99	7	B	N
ATOM	3527	N	HIS	B	64	11.126	36.606	-19.167	1.00	21.77	7	B	N
ATOM	3528	CA	HIS	B	64	11.220	37.980	-18.603	1.00	24.02	6	B	C
ATOM	3529	C	HIS	B	64	10.784	38.079	-17.163	1.00	22.88	6	B	C
ATOM	3530	O	HIS	B	64	10.040	38.959	-16.720	1.00	22.09	8	B	O
ATOM	3531	CB	HIS	B	64	10.359	38.904	-19.465	1.00	25.24	6	B	C
ATOM	3532	CG	HIS	B	64	10.847	38.976	-20.886	1.00	24.90	6	B	C
ATOM	3533	ND1	HIS	B	64	10.067	39.433	-21.910	1.00	25.96	7	B	N
ATOM	3534	CD2	HIS	B	64	12.030	38.628	-21.445	1.00	26.29	6	B	C
ATOM	3535	CE1	HIS	B	64	10.759	39.358	-23.048	1.00	24.94	6	B	C
ATOM	3536	NE2	HIS	B	64	11.953	38.876	-22.797	1.00	23.40	7	B	N
ATOM	3537	N	GLY	B	65	11.296	37.153	-16.340	1.00	22.95	7	B	N
ATOM	3538	CA	GLY	B	65	11.045	37.267	-14.902	1.00	22.47	6	B	C
ATOM	3539	C	GLY	B	65	9.802	36.599	-14.360	1.00	22.76	6	B	C
ATOM	3540	O	GLY	B	65	9.663	36.609	-13.126	1.00	23.06	8	B	O
ATOM	3541	N	LYS	B	66	8.820	36.189	-15.140	1.00	20.47	7	B	N
ATOM	3542	CA	LYS	B	66	7.602	35.580	-14.638	1.00	21.69	6	B	C
ATOM	3543	C	LYS	B	66	7.279	34.225	-15.299	1.00	21.79	6	B	C
ATOM	3544	O	LYS	B	66	7.510	34.050	-16.536	1.00	19.75	8	B	O
ATOM	3545	CB	LYS	B	66	6.393	36.468	-14.977	1.00	25.89	6	B	C
ATOM	3546	CG	LYS	B	66	6.445	37.835	-14.300	1.00	31.80	6	B	C

46/188

ATOM	3547	CD	LYS	B	66	5.266	38.710	-14.733	1.00	33.67	6	B	C
ATOM	3548	CE	LYS	B	66	5.163	39.901	-13.779	1.00	38.98	6	B	C
ATOM	3549	NZ	LYS	B	66	3.954	40.715	-14.156	1.00	43.45	7	B	N
ATOM	3550	N	THR	B	67	6.491	33.439	-14.568	1.00	18.74	7	B	N
ATOM	3551	CA	THR	B	67	5.980	32.199	-15.173	1.00	18.35	6	B	C
ATOM	3552	C	THR	B	67	4.923	32.524	-16.235	1.00	17.75	6	B	C
ATOM	3553	O	THR	B	67	4.294	33.612	-16.208	1.00	17.46	8	B	O
ATOM	3554	CB	THR	B	67	5.407	31.289	-14.078	1.00	18.32	6	B	C
ATOM	3555	OG1	THR	B	67	4.276	31.973	-13.494	1.00	17.55	8	B	O
ATOM	3556	CG2	THR	B	67	6.421	30.992	-12.976	1.00	18.32	6	B	C
ATOM	3557	N	THR	B	68	4.742	31.647	-17.202	1.00	16.36	7	B	N
ATOM	3558	CA	THR	B	68	3.767	31.787	-18.269	1.00	18.64	6	B	C
ATOM	3559	C	THR	B	68	2.617	30.777	-18.108	1.00	19.69	6	B	C
ATOM	3560	O	THR	B	68	1.662	30.843	-18.836	1.00	20.00	8	B	O
ATOM	3561	CB	THR	B	68	4.368	31.489	-19.654	1.00	19.49	6	B	C
ATOM	3562	OG1	THR	B	68	4.813	30.107	-19.592	1.00	20.08	8	B	O
ATOM	3563	CG2	THR	B	68	5.519	32.447	-19.920	1.00	19.91	6	B	C
ATOM	3564	N	GLY	B	69	2.772	29.820	-17.179	1.00	19.33	7	B	N
ATOM	3565	CA	GLY	B	69	1.666	28.853	-17.030	1.00	15.87	6	B	C
ATOM	3566	C	GLY	B	69	2.045	27.569	-17.764	1.00	16.30	6	B	C
ATOM	3567	O	GLY	B	69	1.413	26.545	-17.532	1.00	18.96	8	B	O
ATOM	3568	N	ALA	B	70	3.066	27.620	-18.616	1.00	13.80	7	B	N
ATOM	3569	CA	ALA	B	70	3.592	26.456	-19.296	1.00	16.16	6	B	C
ATOM	3570	C	ALA	B	70	4.530	25.680	-18.365	1.00	15.62	6	B	C
ATOM	3571	O	ALA	B	70	4.853	26.151	-17.253	1.00	16.22	8	B	O
ATOM	3572	CB	ALA	B	70	4.405	26.986	-20.520	1.00	15.30	6	B	C
ATOM	3573	N	PRO	B	71	4.813	24.414	-18.645	1.00	15.42	7	B	N
ATOM	3574	CA	PRO	B	71	5.714	23.587	-17.872	1.00	16.76	6	B	C
ATOM	3575	C	PRO	B	71	7.080	24.238	-17.660	1.00	19.21	6	B	C
ATOM	3576	O	PRO	B	71	7.618	24.881	-18.581	1.00	17.37	8	B	O
ATOM	3577	CB	PRO	B	71	5.836	22.278	-18.639	1.00	17.16	6	B	C
ATOM	3578	CG	PRO	B	71	4.625	22.259	-19.556	1.00	16.45	6	B	C
ATOM	3579	CD	PRO	B	71	4.341	23.703	-19.865	1.00	15.79	6	B	C
ATOM	3580	N	ILE	B	72	7.525	24.198	-16.393	1.00	16.51	7	B	N
ATOM	3581	CA	ILE	B	72	8.766	24.880	-16.038	1.00	17.64	6	B	C
ATOM	3582	C	ILE	B	72	9.869	23.791	-15.901	1.00	18.59	6	B	C
ATOM	3583	O	ILE	B	72	9.678	22.829	-15.158	1.00	17.00	8	B	O
ATOM	3584	CB	ILE	B	72	8.659	25.634	-14.716	1.00	17.45	6	B	C
ATOM	3585	CG1	ILE	B	72	7.708	26.834	-14.786	1.00	15.57	6	B	C
ATOM	3586	CG2	ILE	B	72	10.052	26.068	-14.230	1.00	17.48	6	B	C
ATOM	3587	CD1	ILE	B	72	7.192	27.196	-13.400	1.00	13.61	6	B	C
ATOM	3588	N	THR	B	73	10.970	23.972	-16.619	1.00	17.29	7	B	N
ATOM	3589	CA	THR	B	73	12.088	23.042	-16.568	1.00	18.68	6	B	C
ATOM	3590	C	THR	B	73	13.290	23.732	-15.876	1.00	19.85	6	B	C
ATOM	3591	O	THR	B	73	13.584	24.877	-16.217	1.00	15.81	8	B	O
ATOM	3592	CB	THR	B	73	12.534	22.644	-17.992	1.00	17.57	6	B	C
ATOM	3593	OG1	THR	B	73	11.381	22.066	-18.643	1.00	20.41	8	B	O
ATOM	3594	CG2	THR	B	73	13.628	21.567	-17.941	1.00	18.15	6	B	C
ATOM	3595	N	MET	B	74	13.886	23.051	-14.911	1.00	18.50	7	B	N
ATOM	3596	CA	MET	B	74	15.066	23.467	-14.212	1.00	19.14	6	B	C
ATOM	3597	C	MET	B	74	16.170	22.435	-14.285	1.00	18.65	6	B	C
ATOM	3598	O	MET	B	74	15.888	21.215	-14.174	1.00	20.67	8	B	O
ATOM	3599	CB	MET	B	74	14.684	23.633	-12.690	1.00	19.01	6	B	C
ATOM	3600	CG	MET	B	74	13.710	24.842	-12.663	1.00	17.37	6	B	C
ATOM	3601	SE	MET	B	74	13.232	25.150	-10.694	1.00	35.56	34	B	SE
ATOM	3602	CE2	MET	B	74	12.405	23.372	-10.481	1.00	11.79	6	B	C
ATOM	3603	N	ASP	B	75	17.390	22.856	-14.540	1.00	18.95	7	B	N
ATOM	3604	CA	ASP	B	75	18.532	21.950	-14.568	1.00	21.27	6	B	C
ATOM	3605	C	ASP	B	75	19.488	22.301	-13.430	1.00	19.82	6	B	C
ATOM	3606	O	ASP	B	75	19.646	23.485	-13.206	1.00	19.03	8	B	O
ATOM	3607	CB	ASP	B	75	19.403	22.170	-15.821	1.00	24.40	6	B	C
ATOM	3608	CG	ASP	B	75	18.743	21.784	-17.118	1.00	26.05	6	B	C
ATOM	3609	OD1	ASP	B	75	17.570	21.352	-17.147	1.00	24.91	8	B	O
ATOM	3610	OD2	ASP	B	75	19.484	21.908	-18.121	1.00	26.86	8	B	O
ATOM	3611	N	VAL	B	76	20.158	21.341	-12.825	1.00	21.69	7	B	N
ATOM	3612	CA	VAL	B	76	21.289	21.612	-11.953	1.00	20.80	6	B	C
ATOM	3613	C	VAL	B	76	22.415	20.693	-12.454	1.00	23.00	6	B	C
ATOM	3614	O	VAL	B	76	22.223	19.458	-12.482	1.00	21.45	8	B	O
ATOM	3615	CB	VAL	B	76	21.027	21.411	-10.454	1.00	21.12	6	B	C
ATOM	3616	CG1	VAL	B	76	22.349	21.414	-9.668	1.00	19.08	6	B	C
ATOM	3617	CG2	VAL	B	76	20.113	22.521	-9.945	1.00	16.77	6	B	C
ATOM	3618	N	ILE	B	77	23.522	21.267	-12.910	1.00	23.04	7	B	N
ATOM	3619	CA	ILE	B	77	24.617	20.434	-13.415	1.00	25.70	6	B	C
ATOM	3620	C	ILE	B	77	25.327	19.641	-12.309	1.00	24.47	6	B	C
ATOM	3621	O	ILE	B	77	25.477	20.121	-11.176	1.00	24.36	8	B	O
ATOM	3622	CB	ILE	B	77	25.651	21.285	-14.167	1.00	29.49	6	B	C
ATOM	3623	CG1	ILE	B	77	25.069	21.945	-15.418	1.00	32.39	6	B	C
ATOM	3624	CG2	ILE	B	77	26.893	20.508	-14.609	1.00	30.46	6	B	C
ATOM	3625	CD1	ILE	B	77	24.410	21.009	-16.417	1.00	34.69	6	B	C

47/188

ATOM	3626	N	ASN	B	78	25.817	18.459	-12.599	1.00	22.81	7	B	N
ATOM	3627	CA	ASN	B	78	26.696	17.701	-11.706	1.00	24.49	6	B	C
ATOM	3628	C	ASN	B	78	28.146	17.920	-12.180	1.00	26.53	6	B	C
ATOM	3629	O	ASN	B	78	28.595	17.277	-13.137	1.00	24.71	8	B	O
ATOM	3630	CB	ASN	B	78	26.455	16.194	-11.726	1.00	24.58	6	B	C
ATOM	3631	CG	ASN	B	78	25.120	15.858	-11.059	1.00	24.96	6	B	C
ATOM	3632	OD1	ASN	B	78	24.722	16.577	-10.132	1.00	25.81	8	B	O
ATOM	3633	ND2	ASN	B	78	24.461	14.805	-11.539	1.00	23.29	7	B	N
ATOM	3634	N	LYS	B	79	28.854	18.809	-11.538	1.00	29.46	7	B	N
ATOM	3635	CA	LYS	B	79	30.257	19.113	-11.884	1.00	31.97	6	B	C
ATOM	3636	C	LYS	B	79	31.106	17.863	-11.739	1.00	33.00	6	B	C
ATOM	3637	O	LYS	B	79	31.988	17.547	-12.547	1.00	32.03	8	B	O
ATOM	3638	CB	LYS	B	79	30.714	20.222	-10.927	1.00	35.31	6	B	C
ATOM	3639	CG	LYS	B	79	30.137	21.585	-11.341	1.00	38.16	6	B	C
ATOM	3640	CD	LYS	B	79	30.859	22.674	-10.524	1.00	41.65	6	B	C
ATOM	3641	CE	LYS	B	79	30.428	24.077	-10.945	1.00	43.03	6	B	C
ATOM	3642	NZ	LYS	B	79	31.126	25.093	-10.092	1.00	44.96	7	B	N
ATOM	3643	N	ASP	B	80	30.803	17.082	-10.704	1.00	31.69	7	B	N
ATOM	3644	CA	ASP	B	80	31.539	15.827	-10.506	1.00	32.58	6	B	C
ATOM	3645	C	ASP	B	80	31.470	14.830	-11.646	1.00	30.93	6	B	C
ATOM	3646	O	ASP	B	80	32.188	13.805	-11.650	1.00	30.13	8	B	O
ATOM	3647	CB	ASP	B	80	31.000	15.202	-9.198	1.00	34.23	6	B	C
ATOM	3648	CG	ASP	B	80	31.978	14.229	-8.561	1.00	34.63	6	B	C
ATOM	3649	OD1	ASP	B	80	33.196	14.491	-8.649	1.00	34.29	8	B	O
ATOM	3650	OD2	ASP	B	80	31.519	13.198	-8.020	1.00	34.52	8	B	O
ATOM	3651	N	HIS	B	81	30.506	14.932	-12.559	1.00	29.90	7	B	N
ATOM	3652	CA	HIS	B	81	30.298	13.996	-13.648	1.00	29.09	6	B	C
ATOM	3653	C	HIS	B	81	31.564	13.848	-14.502	1.00	29.00	6	B	C
ATOM	3654	O	HIS	B	81	31.741	12.809	-15.155	1.00	27.90	8	B	O
ATOM	3655	CB	HIS	B	81	29.141	14.382	-14.583	1.00	27.16	6	B	C
ATOM	3656	CG	HIS	B	81	28.895	13.402	-15.702	1.00	24.47	6	B	C
ATOM	3657	ND1	HIS	B	81	28.466	12.108	-15.532	1.00	24.96	7	B	N
ATOM	3658	CD2	HIS	B	81	28.995	13.592	-17.038	1.00	25.69	6	B	C
ATOM	3659	CE1	HIS	B	81	28.306	11.532	-16.702	1.00	25.46	6	B	C
ATOM	3660	NE2	HIS	B	81	28.650	12.391	-17.649	1.00	25.32	7	B	N
ATOM	3661	N	GLN	B	82	32.397	14.879	-14.520	1.00	29.24	7	B	N
ATOM	3662	CA	GLN	B	82	33.623	14.756	-15.327	1.00	33.36	6	B	C
ATOM	3663	C	GLN	B	82	34.538	13.641	-14.835	1.00	33.75	6	B	C
ATOM	3664	O	GLN	B	82	35.470	13.250	-15.543	1.00	34.21	8	B	O
ATOM	3665	CB	GLN	B	82	34.370	16.086	-15.381	1.00	36.54	6	B	C
ATOM	3666	CG	GLN	B	82	33.512	17.246	-15.896	1.00	39.12	6	B	C
ATOM	3667	CD	GLN	B	82	33.010	16.950	-17.287	1.00	41.76	6	B	C
ATOM	3668	OE1	GLN	B	82	33.841	16.653	-18.154	1.00	42.75	8	B	O
ATOM	3669	NE2	GLN	B	82	31.698	16.991	-17.533	1.00	41.53	7	B	N
ATOM	3670	N	LYS	B	83	34.343	13.146	-13.619	1.00	34.37	7	B	N
ATOM	3671	CA	LYS	B	83	35.128	12.068	-13.078	1.00	35.85	6	B	C
ATOM	3672	C	LYS	B	83	34.488	10.715	-13.415	1.00	36.55	6	B	C
ATOM	3673	O	LYS	B	83	35.101	9.673	-13.153	1.00	36.79	8	B	O
ATOM	3674	CB	LYS	B	83	35.252	12.118	-11.552	1.00	39.04	6	B	C
ATOM	3675	CG	LYS	B	83	35.951	13.326	-10.946	1.00	41.77	6	B	C
ATOM	3676	CD	LYS	B	83	37.451	13.238	-11.168	1.00	44.90	6	B	C
ATOM	3677	CE	LYS	B	83	38.191	14.555	-11.034	1.00	47.13	6	B	C
ATOM	3678	NZ	LYS	B	83	38.867	14.954	-12.313	1.00	49.44	7	B	N
ATOM	3679	N	TRP	B	84	33.272	10.707	-13.942	1.00	34.20	7	B	N
ATOM	3680	CA	TRP	B	84	32.538	9.461	-14.167	1.00	32.66	6	B	C
ATOM	3681	C	TRP	B	84	32.114	9.354	-15.630	1.00	33.00	6	B	C
ATOM	3682	O	TRP	B	84	31.060	8.774	-15.894	1.00	30.46	8	B	O
ATOM	3683	CB	TRP	B	84	31.240	9.480	-13.334	1.00	31.10	6	B	C
ATOM	3684	CG	TRP	B	84	31.440	9.666	-11.867	1.00	28.90	6	B	C
ATOM	3685	CD1	TRP	B	84	31.806	10.803	-11.223	1.00	27.10	6	B	C
ATOM	3686	CD2	TRP	B	84	31.417	8.630	-10.867	1.00	28.53	6	B	C
ATOM	3687	NE1	TRP	B	84	31.977	10.547	-9.889	1.00	26.34	7	B	N
ATOM	3688	CE2	TRP	B	84	31.737	9.225	-9.642	1.00	28.68	6	B	C
ATOM	3689	CE3	TRP	B	84	31.135	7.260	-10.908	1.00	30.02	6	B	C
ATOM	3690	CZ2	TRP	B	84	31.708	8.528	-8.426	1.00	29.13	6	B	C
ATOM	3691	CZ3	TRP	B	84	31.153	6.537	-9.730	1.00	29.78	6	B	C
ATOM	3692	CH2	TRP	B	84	31.426	7.194	-8.502	1.00	31.13	6	B	C
ATOM	3693	N	LEU	B	85	32.925	9.907	-16.544	1.00	32.20	7	B	N
ATOM	3694	CA	LEU	B	85	32.469	9.951	-17.935	1.00	31.83	6	B	C
ATOM	3695	C	LEU	B	85	32.192	8.586	-18.529	1.00	33.48	6	B	C
ATOM	3696	O	LEU	B	85	31.214	8.452	-19.279	1.00	33.55	8	B	O
ATOM	3697	CB	LEU	B	85	33.457	10.733	-18.797	1.00	33.53	6	B	C
ATOM	3698	CG	LEU	B	85	33.501	12.242	-18.496	1.00	32.76	6	B	C
ATOM	3699	CD1	LEU	B	85	34.698	12.875	-19.193	1.00	32.95	6	B	C
ATOM	3700	CD2	LEU	B	85	32.213	12.890	-18.981	1.00	34.18	6	B	C
ATOM	3701	N	ASP	B	86	33.064	7.609	-18.262	1.00	33.56	7	B	N
ATOM	3702	CA	ASP	B	86	32.851	6.255	-18.742	1.00	35.49	6	B	C
ATOM	3703	C	ASP	B	86	31.881	5.469	-17.854	1.00	32.81	6	B	C
ATOM	3704	O	ASP	B	86	30.917	4.917	-18.390	1.00	30.95	8	B	O

48/188

ATOM	3705	CB	ASP	B	86	34.154	5.477	-18.914	1.00	37.98	6	B	C
ATOM	3706	CG	ASP	B	86	35.104	5.578	-17.734	1.00	40.92	6	B	C
ATOM	3707	OD1	ASP	B	86	34.760	6.156	-16.686	1.00	41.63	8	B	O
ATOM	3708	OD2	ASP	B	86	36.238	5.070	-17.885	1.00	42.95	8	B	O
ATOM	3709	N	ILE	B	87	32.148	5.377	-16.566	1.00	30.53	7	B	N
ATOM	3710	CA	ILE	B	87	31.264	4.698	-15.640	1.00	28.72	6	B	C
ATOM	3711	C	ILE	B	87	29.796	5.079	-15.858	1.00	28.77	6	B	C
ATOM	3712	O	ILE	B	87	28.978	4.155	-15.801	1.00	27.14	8	B	O
ATOM	3713	CB	ILE	B	87	31.662	5.043	-14.199	1.00	27.94	6	B	C
ATOM	3714	CG1	ILE	B	87	33.133	4.628	-13.943	1.00	28.56	6	B	C
ATOM	3715	CG2	ILE	B	87	30.755	4.436	-13.155	1.00	28.17	6	B	C
ATOM	3716	CD1	ILE	B	87	33.722	5.353	-12.737	1.00	28.54	6	B	C
ATOM	3717	N	MET	B	88	29.470	6.340	-16.097	1.00	25.38	7	B	N
ATOM	3718	CA	MET	B	88	28.060	6.726	-16.228	1.00	27.31	6	B	C
ATOM	3719	C	MET	B	88	27.566	7.106	-17.619	1.00	28.22	6	B	C
ATOM	3720	O	MET	B	88	26.494	7.718	-17.824	1.00	26.45	8	B	O
ATOM	3721	CB	MET	B	88	27.820	7.915	-15.291	1.00	28.54	6	B	C
ATOM	3722	CG	MET	B	88	28.329	7.734	-13.864	1.00	29.11	6	B	C
ATOM	3723	SE	MET	B	88	26.687	6.278	-13.262	1.00	43.00	34	B	SE
ATOM	3724	CE2	MET	B	88	24.926	7.536	-13.243	1.00	22.09	6	B	C
ATOM	3725	N	SER	B	89	28.261	6.626	-18.652	1.00	25.65	7	B	N
ATOM	3726	CA	SER	B	89	27.879	6.974	-20.012	1.00	27.22	6	B	C
ATOM	3727	C	SER	B	89	26.523	6.390	-20.382	1.00	26.06	6	B	C
ATOM	3728	O	SER	B	89	26.256	5.199	-20.111	1.00	23.49	8	B	O
ATOM	3729	CB	SER	B	89	29.007	6.477	-20.966	1.00	27.14	6	B	C
ATOM	3730	OG	SER	B	89	28.610	6.734	-22.293	1.00	29.82	8	B	O
ATOM	3731	N	ALA	B	90	25.730	7.179	-21.143	1.00	25.94	7	B	N
ATOM	3732	CA	ALA	B	90	24.467	6.593	-21.633	1.00	27.49	6	B	C
ATOM	3733	C	ALA	B	90	24.777	5.518	-22.667	1.00	27.35	6	B	C
ATOM	3734	O	ALA	B	90	24.027	4.542	-22.793	1.00	25.87	8	B	O
ATOM	3735	CB	ALA	B	90	23.533	7.653	-22.179	1.00	28.09	6	B	C
ATOM	3736	N	GLU	B	91	25.879	5.666	-23.412	1.00	28.87	7	B	N
ATOM	3737	CA	GLU	B	91	26.208	4.686	-24.444	1.00	33.28	6	B	C
ATOM	3738	C	GLU	B	91	26.964	3.467	-23.939	1.00	32.14	6	B	C
ATOM	3739	O	GLU	B	91	27.727	3.595	-23.011	1.00	30.26	8	B	O
ATOM	3740	CB	GLU	B	91	26.958	5.261	-25.639	1.00	39.09	6	B	C
ATOM	3741	CG	GLU	B	91	27.856	6.447	-25.435	1.00	44.30	6	B	C
ATOM	3742	CD	GLU	B	91	27.176	7.742	-25.056	1.00	47.78	6	B	C
ATOM	3743	OE1	GLU	B	91	27.163	8.058	-23.832	1.00	50.77	8	B	O
ATOM	3744	OE2	GLU	B	91	26.656	8.497	-25.892	1.00	50.22	8	B	O
ATOM	3745	N	ASP	B	92	26.770	2.311	-24.566	1.00	32.52	7	B	N
ATOM	3746	CA	ASP	B	92	27.441	1.096	-24.143	1.00	34.65	6	B	C
ATOM	3747	C	ASP	B	92	28.963	1.238	-24.284	1.00	36.98	6	B	C
ATOM	3748	O	ASP	B	92	29.450	2.015	-25.094	1.00	34.96	8	B	O
ATOM	3749	CB	ASP	B	92	26.880	-0.092	-24.897	1.00	35.30	6	B	C
ATOM	3750	CG	ASP	B	92	27.148	-1.442	-24.278	1.00	37.34	6	B	C
ATOM	3751	OD1	ASP	B	92	27.620	-1.622	-23.129	1.00	34.83	8	B	O
ATOM	3752	OD2	ASP	B	92	26.851	-2.437	-25.002	1.00	39.80	8	B	O
ATOM	3753	N	ILE	B	93	29.727	0.602	-23.397	1.00	39.61	7	B	N
ATOM	3754	CA	ILE	B	93	31.189	0.627	-23.424	1.00	42.75	6	B	C
ATOM	3755	C	ILE	B	93	31.712	-0.812	-23.329	1.00	45.54	6	B	C
ATOM	3756	O	ILE	B	93	30.920	-1.737	-23.090	1.00	44.61	8	B	O
ATOM	3757	CB	ILE	B	93	31.815	1.478	-22.312	1.00	42.40	6	B	C
ATOM	3758	CG1	ILE	B	93	31.484	0.879	-20.940	1.00	41.63	6	B	C
ATOM	3759	CG2	ILE	B	93	31.348	2.923	-22.444	1.00	41.51	6	B	C
ATOM	3760	CD1	ILE	B	93	32.009	1.549	-19.705	1.00	41.56	6	B	C
ATOM	3761	N	GLU	B	94	33.014	-1.003	-23.505	1.00	48.56	7	B	N
ATOM	3762	CA	GLU	B	94	33.617	-2.335	-23.440	1.00	52.62	6	B	C
ATOM	3763	C	GLU	B	94	33.309	-3.069	-22.132	1.00	51.98	6	B	C
ATOM	3764	O	GLU	B	94	33.492	-2.544	-21.030	1.00	51.12	8	B	O
ATOM	3765	CB	GLU	B	94	35.128	-2.277	-23.656	1.00	56.22	6	B	C
ATOM	3766	CG	GLU	B	94	35.788	-1.133	-24.351	1.00	60.85	6	B	C
ATOM	3767	CD	GLU	B	94	35.802	-0.898	-25.832	1.00	63.95	6	B	C
ATOM	3768	OE1	GLU	B	94	36.222	-1.785	-26.624	1.00	65.15	8	B	O
ATOM	3769	OE2	GLU	B	94	35.454	0.226	-26.293	1.00	65.01	8	B	O
ATOM	3770	N	ASP	B	95	32.883	-4.325	-22.212	1.00	51.89	7	B	N
ATOM	3771	CA	ASP	B	95	32.481	-5.112	-21.069	1.00	52.77	6	B	C
ATOM	3772	C	ASP	B	95	33.409	-5.037	-19.867	1.00	51.65	6	B	C
ATOM	3773	O	ASP	B	95	32.863	-4.985	-18.760	1.00	50.57	8	B	O
ATOM	3774	CB	ASP	B	95	32.275	-6.603	-21.383	1.00	55.00	6	B	C
ATOM	3775	CG	ASP	B	95	30.973	-6.836	-22.134	1.00	57.93	6	B	C
ATOM	3776	OD1	ASP	B	95	30.103	-5.920	-22.154	1.00	58.12	8	B	O
ATOM	3777	OD2	ASP	B	95	30.829	-7.945	-22.711	1.00	58.37	8	B	O
ATOM	3778	N	ARG	B	96	34.717	-5.084	-20.061	1.00	50.47	7	B	N
ATOM	3779	CA	ARG	B	96	35.611	-5.092	-18.905	1.00	51.22	6	B	C
ATOM	3780	C	ARG	B	96	35.620	-3.784	-18.127	1.00	47.81	6	B	C
ATOM	3781	O	ARG	B	96	35.748	-3.828	-16.898	1.00	46.39	8	B	O
ATOM	3782	CB	ARG	B	96	37.015	-5.544	-19.312	1.00	55.28	6	B	C
ATOM	3783	CG	ARG	B	96	37.039	-6.898	-20.036	1.00	59.43	6	B	C

49/188

ATOM	3784	CD	ARG	B	96	38.463	-7.420	-20.153	1.00	63.21	6	B	C
ATOM	3785	NE	ARG	B	96	38.753	-8.042	-21.440	1.00	66.42	7	B	N
ATOM	3786	CZ	ARG	B	96	39.951	-8.384	-21.910	1.00	67.77	6	B	C
ATOM	3787	NH1	ARG	B	96	40.063	-8.955	-23.111	1.00	68.19	7	B	N
ATOM	3788	NH2	ARG	B	96	41.061	-8.171	-21.214	1.00	68.12	7	B	N
ATOM	3789	N	LEU	B	97	35.366	-2.650	-18.774	1.00	44.29	7	B	N
ATOM	3790	CA	LEU	B	97	35.398	-1.371	-18.097	1.00	42.78	6	B	C
ATOM	3791	C	LEU	B	97	34.206	-1.210	-17.140	1.00	40.27	6	B	C
ATOM	3792	O	LEU	B	97	34.171	-0.277	-16.345	1.00	37.34	8	B	O
ATOM	3793	CB	LEU	B	97	35.350	-0.217	-19.107	1.00	43.27	6	B	C
ATOM	3794	CG	LEU	B	97	36.657	0.137	-19.824	1.00	44.89	6	B	C
ATOM	3795	CD1	LEU	B	97	36.413	1.132	-20.958	1.00	44.37	6	B	C
ATOM	3796	CD2	LEU	B	97	37.648	0.717	-18.824	1.00	44.04	6	B	C
ATOM	3797	N	LYS	B	98	33.213	-2.072	-17.296	1.00	38.31	7	B	N
ATOM	3798	CA	LYS	B	98	32.007	-1.976	-16.472	1.00	38.45	6	B	C
ATOM	3799	C	LYS	B	98	32.255	-2.392	-15.034	1.00	37.08	6	B	C
ATOM	3800	O	LYS	B	98	31.416	-2.096	-14.184	1.00	37.87	8	B	O
ATOM	3801	CB	LYS	B	98	30.846	-2.751	-17.111	1.00	37.36	6	B	C
ATOM	3802	CG	LYS	B	98	30.342	-2.099	-18.388	1.00	38.08	6	B	C
ATOM	3803	CD	LYS	B	98	29.212	-2.915	-19.022	1.00	39.53	6	B	C
ATOM	3804	CE	LYS	B	98	28.896	-2.348	-20.410	1.00	37.70	6	B	C
ATOM	3805	NZ	LYS	B	98	28.390	-3.449	-21.284	1.00	36.41	7	B	N
ATOM	3806	N	SER	B	99	33.381	-3.016	-14.715	1.00	35.58	7	B	N
ATOM	3807	CA	SER	B	99	33.698	-3.393	-13.347	1.00	33.61	6	B	C
ATOM	3808	C	SER	B	99	34.088	-2.147	-12.549	1.00	31.04	6	B	C
ATOM	3809	O	SER	B	99	34.137	-2.169	-11.315	1.00	27.09	8	B	O
ATOM	3810	CB	SER	B	99	34.854	-4.397	-13.258	1.00	36.12	6	B	C
ATOM	3811	OG	SER	B	99	36.096	-3.721	-13.543	1.00	37.89	8	B	C
ATOM	3812	N	LYS	B	100	34.350	-1.053	-13.259	1.00	31.18	7	B	N
ATOM	3813	CA	LYS	B	100	34.750	0.170	-12.553	1.00	32.74	6	B	C
ATOM	3814	C	LYS	B	100	33.671	0.698	-11.605	1.00	32.41	6	B	C
ATOM	3815	O	LYS	B	100	32.548	1.000	-12.031	1.00	32.31	8	B	O
ATOM	3816	CB	LYS	B	100	35.018	1.256	-13.597	1.00	35.40	6	B	C
ATOM	3817	CG	LYS	B	100	36.269	2.070	-13.337	1.00	39.62	6	B	C
ATOM	3818	CD	LYS	B	100	36.960	2.372	-14.683	1.00	40.85	6	B	C
ATOM	3819	CE	LYS	B	100	37.120	3.890	-14.766	1.00	43.40	6	B	C
ATOM	3820	NZ	LYS	B	100	37.665	4.347	-16.075	1.00	43.72	7	B	N
ATOM	3821	N	ARG	B	101	34.011	0.849	-10.351	1.00	29.43	7	B	N
ATOM	3822	CA	ARG	B	101	33.128	1.309	-9.280	1.00	30.28	6	B	C
ATOM	3823	C	ARG	B	101	31.853	0.471	-9.149	1.00	29.87	6	B	C
ATOM	3824	O	ARG	B	101	30.815	0.889	-8.634	1.00	29.76	8	B	O
ATOM	3825	CB	ARG	B	101	32.823	2.805	-9.369	1.00	29.41	6	B	C
ATOM	3826	CG	ARG	B	101	34.066	3.681	-9.288	1.00	29.92	6	B	C
ATOM	3827	CD	ARG	B	101	34.657	3.585	-7.886	1.00	31.55	6	B	C
ATOM	3828	NE	ARG	B	101	33.847	4.102	-6.804	1.00	30.80	7	B	N
ATOM	3829	CZ	ARG	B	101	33.757	5.274	-6.218	1.00	31.88	6	B	C
ATOM	3830	NH1	ARG	B	101	34.446	6.367	-6.560	1.00	30.57	7	B	N
ATOM	3831	NH2	ARG	B	101	32.910	5.380	-5.182	1.00	31.87	7	B	N
ATOM	3832	N	LYS	B	102	31.960	-0.779	-9.598	1.00	28.29	7	B	N
ATOM	3833	CA	LYS	B	102	30.870	-1.728	-9.520	1.00	29.71	6	B	C
ATOM	3834	C	LYS	B	102	30.597	-2.104	-8.074	1.00	28.89	6	B	C
ATOM	3835	O	LYS	B	102	31.558	-2.315	-7.338	1.00	30.01	8	B	O
ATOM	3836	CB	LYS	B	102	31.219	-2.997	-10.314	1.00	31.05	6	B	C
ATOM	3837	CG	LYS	B	102	30.130	-4.058	-10.238	1.00	29.80	6	B	C
ATOM	3838	CD	LYS	B	102	30.417	-5.098	-11.316	1.00	29.59	6	B	C
ATOM	3839	CE	LYS	B	102	29.590	-6.336	-11.045	1.00	31.89	6	B	C
ATOM	3840	NZ	LYS	B	102	29.582	-7.196	-12.263	1.00	32.82	7	B	N
ATOM	3841	N	ILE	B	103	29.346	-2.039	-7.655	1.00	28.17	7	B	N
ATOM	3842	CA	ILE	B	103	29.005	-2.419	-6.276	1.00	26.73	6	B	C
ATOM	3843	C	ILE	B	103	28.452	-3.820	-6.223	1.00	26.67	6	B	C
ATOM	3844	O	ILE	B	103	27.414	-4.098	-6.823	1.00	26.04	8	B	O
ATOM	3845	CB	ILE	B	103	28.037	-1.392	-5.652	1.00	26.18	6	B	C
ATOM	3846	CG1	ILE	B	103	28.807	-0.072	-5.597	1.00	23.77	6	B	C
ATOM	3847	CG2	ILE	B	103	27.612	-1.832	-4.248	1.00	26.37	6	B	C
ATOM	3848	CD1	ILE	B	103	28.079	1.149	-5.113	1.00	25.30	6	B	C
ATOM	3849	N	THR	B	104	29.079	-4.672	-5.390	1.00	25.64	7	B	N
ATOM	3850	CA	THR	B	104	28.606	-6.016	-5.187	1.00	26.79	6	B	C
ATOM	3851	C	THR	B	104	28.473	-6.292	-3.686	1.00	26.48	6	B	C
ATOM	3852	O	THR	B	104	28.132	-7.428	-3.393	1.00	26.29	8	B	O
ATOM	3853	CB	THR	B	104	29.514	-7.084	-5.841	1.00	25.99	6	B	C
ATOM	3854	OG1	THR	B	104	30.840	-6.950	-5.340	1.00	27.68	8	B	O
ATOM	3855	CG2	THR	B	104	29.530	-6.945	-7.362	1.00	27.48	6	B	C
ATOM	3856	N	HIS	B	105	28.822	-5.383	-2.796	1.00	24.90	7	B	N
ATOM	3857	CA	HIS	B	105	28.749	-5.568	-1.350	1.00	26.45	6	B	C
ATOM	3858	C	HIS	B	105	27.795	-4.491	-0.813	1.00	26.36	6	B	C
ATOM	3859	O	HIS	B	105	28.201	-3.400	-0.396	1.00	26.53	8	B	O
ATOM	3860	CB	HIS	B	105	30.135	-5.371	-0.668	1.00	26.43	6	B	C
ATOM	3861	CG	HIS	B	105	31.201	-6.153	-1.381	1.00	29.69	6	B	C
ATOM	3862	ND1	HIS	B	105	31.202	-7.556	-1.386	1.00	31.29	7	B	N

50/188

ATOM	3863	CD2	HIS	B	105	32.266	-5.775	-2.111	1.00	27.57	6	B	C
ATOM	3864	CE1	HIS	B	105	32.242	-7.973	-2.093	1.00	30.35	6	B	C
ATOM	3865	NE2	HIS	B	105	32.884	-6.920	-2.544	1.00	31.42	7	B	N
ATOM	3866	N	PRO	B	106	26.505	-4.779	-0.837	1.00	26.48	7	B	N
ATOM	3867	CA	PRO	B	106	25.468	-3.815	-0.488	1.00	25.77	6	B	C
ATOM	3868	C	PRO	B	106	25.569	-3.260	0.911	1.00	25.99	6	B	C
ATOM	3869	O	PRO	B	106	25.910	-3.972	1.859	1.00	23.22	8	B	O
ATOM	3870	CB	PRO	B	106	24.142	-4.562	-0.720	1.00	24.15	6	B	C
ATOM	3871	CG	PRO	B	106	24.533	-6.006	-0.634	1.00	25.04	6	B	C
ATOM	3872	CD	PRO	B	106	25.895	-6.052	-1.313	1.00	24.99	6	B	C
ATOM	3873	N	ARG	B	107	25.148	-2.004	1.064	1.00	24.07	7	B	N
ATOM	3874	CA	ARG	B	107	25.209	-1.351	2.343	1.00	23.54	6	B	C
ATOM	3875	C	ARG	B	107	23.863	-1.517	3.082	1.00	24.28	6	B	C
ATOM	3876	O	ARG	B	107	22.812	-1.142	2.566	1.00	24.60	8	B	O
ATOM	3877	CB	ARG	B	107	25.415	0.166	2.165	1.00	23.13	6	B	C
ATOM	3878	CG	ARG	B	107	26.757	0.592	1.605	1.00	25.04	6	B	C
ATOM	3879	CD	ARG	B	107	26.690	2.029	1.082	1.00	25.30	6	B	C
ATOM	3880	NE	ARG	B	107	25.824	2.158	-0.080	1.00	25.32	7	B	N
ATOM	3881	CZ	ARG	B	107	25.585	3.313	-0.713	1.00	26.47	6	B	C
ATOM	3882	NH1	ARG	B	107	26.141	4.425	-0.274	1.00	23.06	7	B	N
ATOM	3883	NH2	ARG	B	107	24.754	3.367	-1.782	1.00	26.66	7	B	N
ATOM	3884	N	PRO	B	108	23.930	-1.993	4.302	1.00	23.05	7	B	N
ATOM	3885	CA	PRO	B	108	22.788	-2.081	5.201	1.00	23.77	6	B	C
ATOM	3886	C	PRO	B	108	22.159	-0.714	5.303	1.00	22.73	6	B	C
ATOM	3887	O	PRO	B	108	22.865	0.308	5.294	1.00	20.85	8	B	O
ATOM	3888	CB	PRO	B	108	23.446	-2.396	6.560	1.00	24.10	6	B	C
ATOM	3889	CG	PRO	B	108	24.502	-3.338	6.085	1.00	23.89	6	B	C
ATOM	3890	CD	PRO	B	108	25.149	-2.511	4.969	1.00	22.67	6	B	C
ATOM	3891	N	GLY	B	109	20.826	-0.647	5.233	1.00	22.20	7	B	N
ATOM	3892	CA	GLY	B	109	20.159	0.638	5.356	1.00	19.68	6	B	C
ATOM	3893	C	GLY	B	109	19.966	1.410	4.065	1.00	20.08	6	B	C
ATOM	3894	O	GLY	B	109	19.273	2.431	4.153	1.00	19.46	8	B	O
ATOM	3895	N	HIS	B	110	20.694	1.131	2.987	1.00	19.12	7	B	N
ATOM	3896	CA	HIS	B	110	20.586	1.860	1.743	1.00	18.31	6	B	C
ATOM	3897	C	HIS	B	110	19.722	1.057	0.770	1.00	20.60	6	B	C
ATOM	3898	O	HIS	B	110	19.306	-0.065	1.078	1.00	19.48	8	B	O
ATOM	3899	CB	HIS	B	110	21.979	2.083	1.080	1.00	20.22	6	B	C
ATOM	3900	CG	HIS	B	110	22.000	3.409	0.370	1.00	19.81	6	B	C
ATOM	3901	ND1	HIS	B	110	21.234	3.679	-0.764	1.00	22.23	7	B	N
ATOM	3902	CD2	HIS	B	110	22.598	4.571	0.753	1.00	20.03	6	B	C
ATOM	3903	CE1	HIS	B	110	21.372	4.965	-1.050	1.00	20.94	6	B	C
ATOM	3904	NE2	HIS	B	110	22.279	5.476	-0.234	1.00	20.60	7	B	N
ATOM	3905	N	ALA	B	111	19.483	1.557	-0.451	1.00	18.59	7	B	N
ATOM	3906	CA	ALA	B	111	18.613	0.877	-1.393	1.00	18.83	6	B	C
ATOM	3907	C	ALA	B	111	19.407	-0.149	-2.185	1.00	19.90	6	B	C
ATOM	3908	O	ALA	B	111	18.795	-0.848	-2.951	1.00	19.54	8	B	O
ATOM	3909	CB	ALA	B	111	18.006	1.918	-2.341	1.00	19.20	6	B	C
ATOM	3910	N	ASP	B	112	20.700	-0.387	-1.926	1.00	20.94	7	B	N
ATOM	3911	CA	ASP	B	112	21.460	-1.286	-2.776	1.00	19.28	6	B	C
ATOM	3912	C	ASP	B	112	20.870	-2.627	-3.112	1.00	20.46	6	B	C
ATOM	3913	O	ASP	B	112	20.636	-2.944	-4.286	1.00	19.33	8	B	O
ATOM	3914	CB	ASP	B	112	22.876	-1.549	-2.186	1.00	20.68	6	B	C
ATOM	3915	CG	ASP	B	112	23.628	-0.260	-1.856	1.00	22.88	6	B	C
ATOM	3916	OD1	ASP	B	112	23.222	0.783	-2.403	1.00	21.67	8	B	O
ATOM	3917	OD2	ASP	B	112	24.646	-0.246	-1.101	1.00	22.18	8	B	O
ATOM	3918	N	LEU	B	113	20.810	-3.552	-2.154	1.00	19.82	7	B	N
ATOM	3919	CA	LEU	B	113	20.447	-4.929	-2.509	1.00	20.95	6	B	C
ATOM	3920	C	LEU	B	113	19.014	-5.060	-3.039	1.00	17.95	6	B	C
ATOM	3921	O	LEU	B	113	18.721	-5.834	-3.958	1.00	18.92	8	B	O
ATOM	3922	CB	LEU	B	113	20.537	-5.775	-1.218	1.00	20.36	6	B	C
ATOM	3923	CG	LEU	B	113	19.996	-7.201	-1.256	1.00	20.40	6	B	C
ATOM	3924	CD1	LEU	B	113	20.755	-8.022	-2.286	1.00	22.50	6	B	C
ATOM	3925	CD2	LEU	B	113	20.135	-7.845	0.123	1.00	20.48	6	B	C
ATOM	3926	N	VAL	B	114	18.115	-4.334	-2.354	1.00	18.21	7	B	N
ATOM	3927	CA	VAL	B	114	16.707	-4.501	-2.652	1.00	17.03	6	B	C
ATOM	3928	C	VAL	B	114	16.438	-3.996	-4.087	1.00	18.43	6	B	C
ATOM	3929	O	VAL	B	114	15.607	-4.581	-4.757	1.00	18.48	8	B	O
ATOM	3930	CB	VAL	B	114	15.804	-3.991	-1.534	1.00	14.49	6	B	C
ATOM	3931	CG1	VAL	B	114	14.345	-3.998	-1.989	1.00	15.46	6	B	C
ATOM	3932	CG2	VAL	B	114	15.908	-4.867	-0.261	1.00	14.82	6	B	C
ATOM	3933	N	GLY	B	115	16.945	-2.804	-4.410	1.00	17.88	7	B	N
ATOM	3934	CA	GLY	B	115	16.894	-2.300	-5.767	1.00	19.67	6	B	C
ATOM	3935	C	GLY	B	115	17.484	-3.333	-6.744	1.00	18.66	6	B	C
ATOM	3936	O	GLY	B	115	16.925	-3.565	-7.813	1.00	18.71	8	B	O
ATOM	3937	N	GLY	B	116	18.547	-4.029	-6.333	1.00	17.26	7	B	N
ATOM	3938	CA	GLY	B	116	19.131	-5.033	-7.244	1.00	16.45	6	B	C
ATOM	3939	C	GLY	B	116	18.186	-6.190	-7.425	1.00	16.26	6	B	C
ATOM	3940	O	GLY	B	116	18.048	-6.692	-8.537	1.00	20.06	8	B	O
ATOM	3941	N	ILE	B	117	17.451	-6.577	-6.366	1.00	19.22	7	B	N



ATOM	3942	CA	ILE	B	117	16.494	-7.689	-6.570	1.00	19.36	6	B	C
ATOM	3943	C	ILE	B	117	15.294	-7.215	-7.401	1.00	18.98	6	B	C
ATOM	3944	O	ILE	B	117	14.862	-7.879	-8.361	1.00	18.64	8	B	O
ATOM	3945	CB	ILE	B	117	16.021	-8.208	-5.212	1.00	20.12	6	B	C
ATOM	3946	CG1	ILE	B	117	17.180	-9.008	-4.586	1.00	19.97	6	B	C
ATOM	3947	CG2	ILE	B	117	14.755	-9.039	-5.304	1.00	17.78	6	B	C
ATOM	3948	CD1	ILE	B	117	17.038	-9.118	-3.076	1.00	20.49	6	B	C
ATOM	3949	N	LYS	B	118	14.790	-6.032	-7.035	1.00	18.17	7	B	N
ATOM	3950	CA	LYS	B	118	13.629	-5.494	-7.741	1.00	18.28	6	B	C
ATOM	3951	C	LYS	B	118	13.853	-5.323	-9.241	1.00	18.30	6	B	C
ATOM	3952	O	LYS	B	118	13.035	-5.702	-10.089	1.00	18.21	8	B	O
ATOM	3953	CB	LYS	B	118	13.297	-4.077	-7.220	1.00	17.46	6	B	C
ATOM	3954	CG	LYS	B	118	12.003	-3.473	-7.822	1.00	18.60	6	B	C
ATOM	3955	CD	LYS	B	118	11.741	-2.147	-7.050	1.00	18.89	6	B	C
ATOM	3956	CE	LYS	B	118	10.592	-1.350	-7.675	1.00	18.23	6	B	C
ATOM	3957	NZ	LYS	B	118	9.249	-1.999	-7.393	1.00	17.10	7	B	N
ATOM	3958	N	TYR	B	119	14.967	-4.666	-9.541	1.00	18.31	7	B	N
ATOM	3959	CA	TYR	B	119	15.289	-4.329	-10.926	1.00	17.64	6	B	C
ATOM	3960	C	TYR	B	119	16.236	-5.313	-11.598	1.00	19.13	6	B	C
ATOM	3961	O	TYR	B	119	16.495	-5.098	-12.796	1.00	19.17	8	B	O
ATOM	3962	CB	TYR	B	119	15.833	-2.881	-10.988	1.00	17.69	6	B	C
ATOM	3963	CG	TYR	B	119	14.785	-1.819	-10.619	1.00	19.20	6	B	C
ATOM	3964	CD1	TYR	B	119	14.957	-0.973	-9.539	1.00	16.94	6	B	C
ATOM	3965	CD2	TYR	B	119	13.661	-1.657	-11.407	1.00	18.29	6	B	C
ATOM	3966	CE1	TYR	B	119	13.998	-0.055	-9.197	1.00	17.87	6	B	C
ATOM	3967	CE2	TYR	B	119	12.687	-0.698	-11.116	1.00	19.10	6	B	C
ATOM	3968	CZ	TYR	B	119	12.887	0.120	-10.015	1.00	19.27	6	B	C
ATOM	3969	OH	TYR	B	119	11.931	1.022	-9.667	1.00	18.76	8	B	O
ATOM	3970	N	ARG	B	120	16.631	-6.401	-10.961	1.00	17.74	7	B	N
ATOM	3971	CA	ARG	B	120	17.489	-7.419	-11.553	1.00	21.52	6	B	C
ATOM	3972	C	ARG	B	120	18.846	-6.832	-11.980	1.00	22.06	6	B	C
ATOM	3973	O	ARG	B	120	19.319	-7.103	-13.074	1.00	22.67	8	B	O
ATOM	3974	CB	ARG	B	120	16.796	-8.255	-12.644	1.00	20.24	6	B	C
ATOM	3975	CG	ARG	B	120	15.571	-8.950	-12.013	1.00	20.14	6	B	C
ATOM	3976	CD	ARG	B	120	14.844	-9.874	-12.974	1.00	19.83	6	B	C
ATOM	3977	NE	ARG	B	120	13.709	-10.524	-12.314	1.00	20.61	7	B	N
ATOM	3978	CZ	ARG	B	120	13.125	-11.634	-12.759	1.00	21.68	6	B	C
ATOM	3979	NH1	ARG	B	120	13.619	-12.185	-13.884	1.00	18.88	7	B	N
ATOM	3980	NH2	ARG	B	120	12.095	-12.145	-12.107	1.00	20.20	7	B	N
ATOM	3981	N	PHE	B	121	19.461	-6.081	-11.050	1.00	20.77	7	B	N
ATOM	3982	CA	PHE	B	121	20.758	-5.514	-11.400	1.00	23.06	6	B	C
ATOM	3983	C	PHE	B	121	21.901	-6.472	-11.064	1.00	23.83	6	B	C
ATOM	3984	O	PHE	B	121	21.762	-7.282	-10.155	1.00	26.73	8	B	O
ATOM	3985	CB	PHE	B	121	21.021	-4.212	-10.654	1.00	19.61	6	B	C
ATOM	3986	CG	PHE	B	121	20.070	-3.064	-10.837	1.00	20.58	6	B	C
ATOM	3987	CD1	PHE	B	121	19.634	-2.691	-12.120	1.00	22.81	6	B	C
ATOM	3988	CD2	PHE	B	121	19.763	-2.220	-9.796	1.00	18.91	6	B	C
ATOM	3989	CE1	PHE	B	121	18.806	-1.605	-12.294	1.00	22.26	6	B	C
ATOM	3990	CE2	PHE	B	121	18.918	-1.118	-9.959	1.00	19.32	6	B	C
ATOM	3991	CZ	PHE	B	121	18.451	-0.820	-11.201	1.00	19.02	6	B	C
ATOM	3992	N	ASP	B	122	23.020	-6.411	-11.740	1.00	25.94	7	B	N
ATOM	3993	CA	ASP	B	122	24.230	-7.177	-11.402	1.00	27.27	6	B	C
ATOM	3994	C	ASP	B	122	25.181	-6.178	-10.742	1.00	25.00	6	B	C
ATOM	3995	O	ASP	B	122	26.044	-6.509	-9.945	1.00	22.77	8	B	O
ATOM	3996	CB	ASP	B	122	24.965	-7.741	-12.628	1.00	29.52	6	B	C
ATOM	3997	CG	ASP	B	122	24.104	-8.896	-13.151	1.00	31.97	6	B	C
ATOM	3998	OD1	ASP	B	122	23.594	-9.664	-12.316	1.00	31.76	8	B	O
ATOM	3999	OD2	ASP	B	122	23.911	-8.950	-14.365	1.00	33.83	8	B	O
ATOM	4000	N	ASP	B	123	24.958	-4.894	-11.057	1.00	24.53	7	B	N
ATOM	4001	CA	ASP	B	123	25.788	-3.832	-10.476	1.00	23.75	6	B	C
ATOM	4002	C	ASP	B	123	24.900	-2.940	-9.603	1.00	24.16	6	B	C
ATOM	4003	O	ASP	B	123	24.020	-2.341	-10.175	1.00	22.17	8	B	O
ATOM	4004	CB	ASP	B	123	26.506	-3.018	-11.533	1.00	24.02	6	B	C
ATOM	4005	CG	ASP	B	123	27.268	-1.817	-10.978	1.00	24.29	6	B	C
ATOM	4006	OD1	ASP	B	123	27.347	-1.580	-9.762	1.00	23.26	8	B	O
ATOM	4007	OD2	ASP	B	123	27.840	-1.063	-11.803	1.00	27.24	8	B	O
ATOM	4008	N	LEU	B	124	25.123	-2.880	-8.282	1.00	23.31	7	B	N
ATOM	4009	CA	LEU	B	124	24.228	-2.150	-7.410	1.00	23.27	6	B	C
ATOM	4010	C	LEU	B	124	24.438	-0.647	-7.452	1.00	22.85	6	B	C
ATOM	4011	O	LEU	B	124	23.650	0.058	-6.829	1.00	22.08	8	B	O
ATOM	4012	CB	LEU	B	124	24.220	-2.711	-5.988	1.00	23.90	6	B	C
ATOM	4013	CG	LEU	B	124	23.994	-4.232	-5.916	1.00	23.29	6	B	C
ATOM	4014	CD1	LEU	B	124	24.077	-4.702	-4.466	1.00	22.17	6	B	C
ATOM	4015	CD2	LEU	B	124	22.661	-4.573	-6.543	1.00	22.87	6	B	C
ATOM	4016	N	ARG	B	125	25.428	-0.154	-8.203	1.00	22.60	7	B	N
ATOM	4017	CA	ARG	B	125	25.537	1.307	-8.316	1.00	23.75	6	B	C
ATOM	4018	C	ARG	B	125	24.272	1.767	-9.086	1.00	21.49	6	B	C
ATOM	4019	O	ARG	B	125	23.911	2.934	-9.042	1.00	22.85	8	B	O
ATOM	4020	CB	ARG	B	125	26.773	1.702	-9.152	1.00	23.15	6	B	C

52/188

ATOM	4021	CG	ARG	B	125	26.867	3.157	-9.533	1.00	22.35	6	B	C
ATOM	4022	CD	ARG	B	125	28.278	3.542	-10.077	1.00	24.66	6	B	C
ATOM	4023	NE	ARG	B	125	29.209	3.338	-8.966	1.00	22.87	7	B	N
ATOM	4024	CZ	ARG	B	125	29.260	4.018	-7.843	1.00	23.47	6	B	C
ATOM	4025	NH1	ARG	B	125	28.537	5.093	-7.576	1.00	21.19	7	B	N
ATOM	4026	NH2	ARG	B	125	30.114	3.578	-6.909	1.00	24.10	7	B	N
ATOM	4027	N	ASN	B	126	23.576	0.842	-9.724	1.00	20.14	7	B	N
ATOM	4028	CA	ASN	B	126	22.385	1.270	-10.511	1.00	21.22	6	B	C
ATOM	4029	C	ASN	B	126	21.218	1.538	-9.554	1.00	22.62	6	B	C
ATOM	4030	O	ASN	B	126	20.254	2.221	-9.897	1.00	21.67	8	B	O
ATOM	4031	CB	ASN	B	126	22.079	0.234	-11.566	1.00	22.46	6	B	C
ATOM	4032	CG	ASN	B	126	23.026	0.335	-12.760	1.00	22.92	6	B	C
ATOM	4033	OD1	ASN	B	126	23.491	1.423	-13.096	1.00	23.06	8	B	O
ATOM	4034	ND2	ASN	B	126	23.241	-0.770	-13.439	1.00	23.41	7	B	N
ATOM	4035	N	SER	B	127	21.337	1.013	-8.336	1.00	20.17	7	B	N
ATOM	4036	CA	SER	B	127	20.418	1.316	-7.284	1.00	23.98	6	B	C
ATOM	4037	C	SER	B	127	20.902	2.676	-6.701	1.00	22.54	6	B	C
ATOM	4038	O	SER	B	127	20.080	3.562	-6.516	1.00	21.29	8	B	O
ATOM	4039	CB	SER	B	127	20.349	0.378	-6.071	1.00	23.98	6	B	C
ATOM	4040	OG	SER	B	127	20.083	-0.929	-6.467	1.00	26.70	8	B	O
ATOM	4041	N	LEU	B	128	22.202	2.754	-6.453	1.00	22.52	7	B	N
ATOM	4042	CA	LEU	B	128	22.763	3.912	-5.774	1.00	21.59	6	B	C
ATOM	4043	C	LEU	B	128	22.505	5.221	-6.483	1.00	20.30	6	B	C
ATOM	4044	O	LEU	B	128	22.078	6.201	-5.871	1.00	22.66	8	B	O
ATOM	4045	CB	LEU	B	128	24.294	3.740	-5.662	1.00	24.28	6	B	C
ATOM	4046	CG	LEU	B	128	25.054	4.871	-4.974	1.00	26.86	6	B	C
ATOM	4047	CD1	LEU	B	128	26.387	4.339	-4.444	1.00	26.62	6	B	C
ATOM	4048	CD2	LEU	B	128	25.344	6.073	-5.864	1.00	26.63	6	B	C
ATOM	4049	N	GLU	B	129	22.791	5.260	-7.789	1.00	20.88	7	B	N
ATOM	4050	CA	GLU	B	129	22.797	6.557	-8.484	1.00	22.21	6	B	C
ATOM	4051	C	GLU	B	129	21.484	7.309	-8.446	1.00	21.36	6	B	C
ATOM	4052	O	GLU	B	129	21.513	8.530	-8.493	1.00	19.95	8	B	O
ATOM	4053	CB	GLU	B	129	23.275	6.338	-9.928	1.00	22.71	6	B	C
ATOM	4054	CG	GLU	B	129	24.792	5.978	-9.895	1.00	21.95	6	B	C
ATOM	4055	CD	GLU	B	129	25.667	7.160	-9.590	1.00	22.84	6	B	C
ATOM	4056	OE1	GLU	B	129	25.328	8.320	-9.926	1.00	23.23	8	B	O
ATOM	4057	OE2	GLU	B	129	26.772	6.932	-9.022	1.00	24.08	8	B	O
ATOM	4058	N	ARG	B	130	20.377	6.548	-8.488	1.00	19.93	7	B	N
ATOM	4059	CA	ARG	B	130	19.069	7.183	-8.401	1.00	19.92	6	B	C
ATOM	4060	C	ARG	B	130	18.539	7.276	-6.977	1.00	20.62	6	B	C
ATOM	4061	O	ARG	B	130	17.857	8.285	-6.674	1.00	20.55	8	B	O
ATOM	4062	CB	ARG	B	130	18.011	6.507	-9.277	1.00	17.24	6	B	C
ATOM	4063	CG	ARG	B	130	16.677	7.257	-9.303	1.00	18.60	6	B	C
ATOM	4064	CD	ARG	B	130	16.647	8.722	-9.659	1.00	19.52	6	B	C
ATOM	4065	NE	ARG	B	130	15.373	9.396	-9.343	1.00	18.78	7	B	N
ATOM	4066	CZ	ARG	B	130	15.137	10.704	-9.419	1.00	20.14	6	B	C
ATOM	4067	NH1	ARG	B	130	16.046	11.590	-9.814	1.00	16.88	7	B	N
ATOM	4068	NH2	ARG	B	130	13.958	11.236	-9.061	1.00	19.48	7	B	N
ATOM	4069	N	SER	B	131	18.873	6.290	-6.117	1.00	19.47	7	B	N
ATOM	4070	CA	SER	B	131	18.304	6.412	-4.758	1.00	21.34	6	B	C
ATOM	4071	C	SER	B	131	19.028	7.449	-3.912	1.00	21.25	6	B	C
ATOM	4072	O	SER	B	131	18.536	7.913	-2.897	1.00	20.80	8	B	O
ATOM	4073	CB	SER	B	131	18.429	5.073	-3.984	1.00	21.09	6	B	C
ATOM	4074	OG	SER	B	131	19.840	4.773	-3.824	1.00	18.95	8	B	O
ATOM	4075	N	SER	B	132	20.245	7.812	-4.295	1.00	21.28	7	B	N
ATOM	4076	CA	SER	B	132	21.040	8.801	-3.586	1.00	20.35	6	B	C
ATOM	4077	C	SER	B	132	20.281	10.103	-3.362	1.00	19.25	6	B	C
ATOM	4078	O	SER	B	132	19.454	10.532	-4.164	1.00	19.72	8	B	O
ATOM	4079	CB	SER	B	132	22.309	9.072	-4.448	1.00	21.79	6	B	C
ATOM	4080	OG	SER	B	132	22.819	10.341	-4.141	1.00	23.96	8	B	O
ATOM	4081	N	ALA	B	133	20.588	10.850	-2.321	1.00	18.21	7	B	N
ATOM	4082	CA	ALA	B	133	19.943	12.088	-1.951	1.00	18.63	6	B	C
ATOM	4083	C	ALA	B	133	20.369	13.273	-2.805	1.00	19.88	6	B	C
ATOM	4084	O	ALA	B	133	19.899	14.405	-2.616	1.00	16.62	8	B	O
ATOM	4085	CB	ALA	B	133	20.078	12.359	-0.445	1.00	21.62	6	B	C
ATOM	4086	N	ARG	B	134	21.239	13.018	-3.818	1.00	18.69	7	B	N
ATOM	4087	CA	ARG	B	134	21.544	14.129	-4.724	1.00	20.97	6	B	C
ATOM	4088	C	ARG	B	134	20.221	14.670	-5.308	1.00	21.40	6	B	C
ATOM	4089	O	ARG	B	134	19.978	15.864	-5.555	1.00	20.31	8	B	O
ATOM	4090	CB	ARG	B	134	22.483	13.572	-5.826	1.00	20.72	6	B	C
ATOM	4091	CG	ARG	B	134	22.901	14.610	-6.858	1.00	17.97	6	B	C
ATOM	4092	CD	ARG	B	134	23.837	15.668	-6.234	1.00	21.12	6	B	C
ATOM	4093	NE	ARG	B	134	24.171	16.697	-7.216	1.00	21.61	7	B	N
ATOM	4094	CZ	ARG	B	134	24.321	17.988	-6.973	1.00	22.59	6	B	C
ATOM	4095	NH1	ARG	B	134	24.165	18.462	-5.750	1.00	20.25	7	B	N
ATOM	4096	NH2	ARG	B	134	24.572	18.833	-7.993	1.00	22.13	7	B	N
ATOM	4097	N	GLU	B	135	19.268	13.760	-5.440	1.00	21.96	7	B	N
ATOM	4098	CA	GLU	B	135	17.946	14.042	-5.994	1.00	22.18	6	B	C
ATOM	4099	C	GLU	B	135	17.214	15.105	-5.173	1.00	20.35	6	B	C

53/188

ATOM	4100	O	GLU	B	135	16.339	15.750	-5.757	1.00	17.68	8	B	O
ATOM	4101	CB	GLU	B	135	17.033	12.815	-6.011	1.00	22.61	6	B	C
ATOM	4102	CG	GLU	B	135	15.665	13.021	-6.640	1.00	23.77	6	B	C
ATOM	4103	CD	GLU	B	135	14.596	13.323	-5.606	1.00	27.11	6	B	C
ATOM	4104	OE1	GLU	B	135	13.458	13.574	-6.049	1.00	25.96	8	B	O
ATOM	4105	OE2	GLU	B	135	14.861	13.335	-4.374	1.00	26.11	8	B	O
ATOM	4106	N	THR	B	136	17.496	15.205	-3.882	1.00	19.93	7	B	N
ATOM	4107	CA	THR	B	136	16.799	16.172	-3.047	1.00	18.68	6	B	C
ATOM	4108	C	THR	B	136	17.074	17.593	-3.503	1.00	19.21	6	B	C
ATOM	4109	O	THR	B	136	16.292	18.513	-3.199	1.00	17.59	8	B	O
ATOM	4110	CB	THR	B	136	17.092	16.083	-1.527	1.00	20.52	6	B	C
ATOM	4111	OG1	THR	B	136	18.499	16.169	-1.279	1.00	19.55	8	B	O
ATOM	4112	CG2	THR	B	136	16.550	14.778	-0.960	1.00	19.30	6	B	C
ATOM	4113	N	THR	B	137	18.174	17.783	-4.237	1.00	18.44	7	B	N
ATOM	4114	CA	THR	B	137	18.498	19.090	-4.805	1.00	17.79	6	B	C
ATOM	4115	C	THR	B	137	17.292	19.558	-5.653	1.00	18.17	6	B	C
ATOM	4116	O	THR	B	137	16.906	20.724	-5.626	1.00	18.50	8	B	O
ATOM	4117	CB	THR	B	137	19.678	18.921	-5.808	1.00	17.17	6	B	C
ATOM	4118	OG1	THR	B	137	20.806	18.362	-5.125	1.00	16.88	8	B	O
ATOM	4119	CG2	THR	B	137	20.060	20.218	-6.489	1.00	18.14	6	B	C
ATOM	4120	N	MET	B	138	16.776	18.641	-6.491	1.00	18.50	7	B	N
ATOM	4121	CA	MET	B	138	15.676	19.086	-7.391	1.00	16.43	6	B	C
ATOM	4122	C	MET	B	138	14.396	19.194	-6.534	1.00	16.43	6	B	C
ATOM	4123	O	MET	B	138	13.479	19.905	-6.911	1.00	16.16	8	B	O
ATOM	4124	CB	MET	B	138	15.454	18.058	-8.513	1.00	15.50	6	B	C
ATOM	4125	CG	MET	B	138	16.655	17.964	-9.469	1.00	16.96	6	B	C
ATOM	4126	SE	MET	B	138	17.361	19.796	-9.782	1.00	40.59	34	B	SE
ATOM	4127	CE2	MET	B	138	15.942	20.412	-10.876	1.00	18.99	6	B	C
ATOM	4128	N	ARG	B	139	14.250	18.414	-5.470	1.00	15.55	7	B	N
ATOM	4129	CA	ARG	B	139	13.002	18.560	-4.676	1.00	15.50	6	B	C
ATOM	4130	C	ARG	B	139	13.046	19.946	-4.008	1.00	16.78	6	B	C
ATOM	4131	O	ARG	B	139	12.025	20.574	-3.782	1.00	16.78	8	B	O
ATOM	4132	CB	ARG	B	139	12.809	17.449	-3.627	1.00	14.83	6	B	C
ATOM	4133	CG	ARG	B	139	12.650	16.061	-4.203	1.00	17.84	6	B	C
ATOM	4134	CD	ARG	B	139	12.363	14.979	-3.128	1.00	18.81	6	B	C
ATOM	4135	NE	ARG	B	139	10.966	15.136	-2.685	1.00	17.30	7	B	N
ATOM	4136	CZ	ARG	B	139	10.375	14.303	-1.839	1.00	16.85	6	B	C
ATOM	4137	NH1	ARG	B	139	11.094	13.300	-1.339	1.00	15.06	7	B	N
ATOM	4138	NH2	ARG	B	139	9.114	14.512	-1.509	1.00	18.24	7	B	N
ATOM	4139	N	VAL	B	140	14.209	20.416	-3.586	1.00	15.44	7	B	N
ATOM	4140	CA	VAL	B	140	14.403	21.771	-3.095	1.00	16.01	6	B	C
ATOM	4141	C	VAL	B	140	14.196	22.805	-4.196	1.00	17.56	6	B	C
ATOM	4142	O	VAL	B	140	13.554	23.813	-3.908	1.00	18.86	8	B	O
ATOM	4143	CB	VAL	B	140	15.784	21.874	-2.414	1.00	16.04	6	B	C
ATOM	4144	CG1	VAL	B	140	16.168	23.315	-2.128	1.00	13.24	6	B	C
ATOM	4145	CG2	VAL	B	140	15.648	21.117	-1.078	1.00	14.72	6	B	C
ATOM	4146	N	ALA	B	141	14.653	22.570	-5.429	1.00	17.38	7	B	N
ATOM	4147	CA	ALA	B	141	14.357	23.510	-6.518	1.00	19.66	6	B	C
ATOM	4148	C	ALA	B	141	12.839	23.635	-6.726	1.00	19.42	6	B	C
ATOM	4149	O	ALA	B	141	12.337	24.751	-6.879	1.00	17.63	8	B	O
ATOM	4150	CB	ALA	B	141	15.034	23.070	-7.817	1.00	17.75	6	B	C
ATOM	4151	N	VAL	B	142	12.117	22.513	-6.698	1.00	17.30	7	B	N
ATOM	4152	CA	VAL	B	142	10.634	22.617	-6.845	1.00	16.54	6	B	C
ATOM	4153	C	VAL	B	142	10.023	23.354	-5.684	1.00	17.43	6	B	C
ATOM	4154	O	VAL	B	142	9.097	24.166	-5.827	1.00	16.95	8	B	O
ATOM	4155	CB	VAL	B	142	10.003	21.210	-6.973	1.00	17.06	6	B	C
ATOM	4156	CG1	VAL	B	142	8.473	21.224	-7.050	1.00	14.38	6	B	C
ATOM	4157	CG2	VAL	B	142	10.514	20.617	-8.302	1.00	15.05	6	B	C
ATOM	4158	N	GLY	B	143	10.483	23.057	-4.447	1.00	17.91	7	B	N
ATOM	4159	CA	GLY	B	143	9.961	23.706	-3.268	1.00	17.19	6	B	C
ATOM	4160	C	GLY	B	143	10.150	25.232	-3.322	1.00	18.08	6	B	C
ATOM	4161	O	GLY	B	143	9.318	25.983	-2.819	1.00	14.25	8	B	O
ATOM	4162	N	ALA	B	144	11.272	25.637	-3.944	1.00	16.54	7	B	N
ATOM	4163	CA	ALA	B	144	11.533	27.062	-4.023	1.00	16.59	6	B	C
ATOM	4164	C	ALA	B	144	10.512	27.755	-4.917	1.00	17.63	6	B	C
ATOM	4165	O	ALA	B	144	10.148	28.904	-4.675	1.00	17.01	8	B	O
ATOM	4166	CB	ALA	B	144	12.949	27.278	-4.528	1.00	17.03	6	B	C
ATOM	4167	N	VAL	B	145	10.028	27.050	-5.942	1.00	17.21	7	B	N
ATOM	4168	CA	VAL	B	145	8.966	27.634	-6.768	1.00	16.40	6	B	C
ATOM	4169	C	VAL	B	145	7.683	27.676	-5.941	1.00	15.62	6	B	C
ATOM	4170	O	VAL	B	145	6.928	28.647	-5.919	1.00	15.68	8	B	O
ATOM	4171	CB	VAL	B	145	8.712	26.768	-8.013	1.00	18.13	6	B	C
ATOM	4172	CG1	VAL	B	145	7.565	27.424	-8.809	1.00	17.16	6	B	C
ATOM	4173	CG2	VAL	B	145	9.993	26.638	-8.861	1.00	15.89	6	B	C
ATOM	4174	N	ALA	B	146	7.437	26.592	-5.249	1.00	14.51	7	B	N
ATOM	4175	CA	ALA	B	146	6.241	26.508	-4.382	1.00	16.29	6	B	C
ATOM	4176	C	ALA	B	146	6.251	27.632	-3.342	1.00	17.08	6	B	C
ATOM	4177	O	ALA	B	146	5.272	28.339	-3.147	1.00	18.93	8	B	O
ATOM	4178	CB	ALA	B	146	6.226	25.185	-3.675	1.00	15.90	6	B	C

54/188

ATOM	4179	N	LYS	B	147	7.415	27.881	-2.753	1.00	17.28	7	B	N
ATOM	4180	CA	LYS	B	147	7.584	28.888	-1.724	1.00	16.32	6	B	C
ATOM	4181	C	LYS	B	147	7.338	30.292	-2.259	1.00	18.97	6	B	C
ATOM	4182	O	LYS	B	147	6.851	31.166	-1.518	1.00	17.04	8	B	O
ATOM	4183	CB	LYS	B	147	9.008	28.737	-1.169	1.00	19.73	6	B	C
ATOM	4184	CG	LYS	B	147	9.096	27.832	0.038	1.00	19.38	6	B	C
ATOM	4185	CD	LYS	B	147	10.529	27.579	0.511	1.00	19.58	6	B	C
ATOM	4186	CE	LYS	B	147	11.178	28.828	1.046	1.00	20.31	6	B	C
ATOM	4187	NZ	LYS	B	147	12.630	28.624	1.365	1.00	23.39	7	B	N
ATOM	4188	N	ARG	B	148	7.621	30.525	-3.557	1.00	18.28	7	B	N
ATOM	4189	CA	ARG	B	148	7.344	31.854	-4.139	1.00	20.03	6	B	C
ATOM	4190	C	ARG	B	148	5.853	32.081	-4.171	1.00	21.41	6	B	C
ATOM	4191	O	ARG	B	148	5.335	33.169	-3.945	1.00	22.02	8	B	O
ATOM	4192	CB	ARG	B	148	7.936	31.945	-5.565	1.00	21.86	6	B	C
ATOM	4193	CG	ARG	B	148	9.445	32.119	-5.550	1.00	20.57	6	B	C
ATOM	4194	CD	ARG	B	148	9.778	33.570	-5.044	1.00	25.09	6	B	C
ATOM	4195	NE	ARG	B	148	8.928	34.460	-5.805	1.00	26.31	7	B	N
ATOM	4196	CZ	ARG	B	148	8.069	35.399	-5.443	1.00	26.32	6	B	C
ATOM	4197	NH1	ARG	B	148	7.941	35.701	-4.161	1.00	23.48	7	B	N
ATOM	4198	NH2	ARG	B	148	7.278	35.940	-6.391	1.00	21.16	7	B	N
ATOM	4199	N	LEU	B	149	5.101	31.016	-4.510	1.00	20.60	7	B	N
ATOM	4200	CA	LEU	B	149	3.654	31.112	-4.474	1.00	21.40	6	B	C
ATOM	4201	C	LEU	B	149	3.155	31.387	-3.055	1.00	20.83	6	B	C
ATOM	4202	O	LEU	B	149	2.227	32.171	-2.870	1.00	19.30	8	B	O
ATOM	4203	CB	LEU	B	149	3.072	29.766	-4.924	1.00	23.48	6	B	C
ATOM	4204	CG	LEU	B	149	2.660	29.654	-6.376	1.00	27.42	6	B	C
ATOM	4205	CD1	LEU	B	149	2.180	28.235	-6.648	1.00	28.48	6	B	C
ATOM	4206	CD2	LEU	B	149	1.538	30.694	-6.612	1.00	27.22	6	B	C
ATOM	4207	N	LEU	B	150	3.729	30.680	-2.087	1.00	20.07	7	B	N
ATOM	4208	CA	LEU	B	150	3.324	30.899	-0.684	1.00	21.32	6	B	C
ATOM	4209	C	LEU	B	150	3.602	32.329	-0.215	1.00	20.68	6	B	C
ATOM	4210	O	LEU	B	150	2.781	32.923	0.522	1.00	18.66	8	B	O
ATOM	4211	CB	LEU	B	150	3.994	29.926	0.284	1.00	21.72	6	B	C
ATOM	4212	CG	LEU	B	150	3.846	28.431	-0.011	1.00	22.77	6	B	C
ATOM	4213	CD1	LEU	B	150	4.327	27.635	1.198	1.00	25.02	6	B	C
ATOM	4214	CD2	LEU	B	150	2.385	28.107	-0.288	1.00	24.98	6	B	C
ATOM	4215	N	ALA	B	151	4.717	32.883	-0.667	1.00	19.27	7	B	N
ATOM	4216	CA	ALA	B	151	5.048	34.275	-0.321	1.00	20.57	6	B	C
ATOM	4217	C	ALA	B	151	4.083	35.250	-0.978	1.00	21.02	6	B	C
ATOM	4218	O	ALA	B	151	3.759	36.240	-0.335	1.00	22.56	8	B	O
ATOM	4219	CB	ALA	B	151	6.475	34.605	-0.755	1.00	21.64	6	B	C
ATOM	4220	N	GLU	B	152	3.629	35.044	-2.220	1.00	20.88	7	B	N
ATOM	4221	CA	GLU	B	152	2.685	35.997	-2.831	1.00	20.41	6	B	C
ATOM	4222	C	GLU	B	152	1.361	35.977	-2.086	1.00	21.56	6	B	C
ATOM	4223	O	GLU	B	152	0.546	36.898	-2.202	1.00	21.99	8	B	O
ATOM	4224	CB	GLU	B	152	2.416	35.619	-4.310	1.00	20.89	6	B	C
ATOM	4225	CG	GLU	B	152	3.674	35.736	-5.154	1.00	21.01	6	B	C
ATOM	4226	CD	GLU	B	152	4.024	37.153	-5.545	1.00	22.88	6	B	C
ATOM	4227	OE1	GLU	B	152	3.211	38.054	-5.328	1.00	22.41	8	B	O
ATOM	4228	OE2	GLU	B	152	5.131	37.403	-6.085	1.00	25.15	8	B	O
ATOM	4229	N	LEU	B	153	1.095	34.899	-1.344	1.00	20.51	7	B	N
ATOM	4230	CA	LEU	B	153	-0.111	34.714	-0.577	1.00	23.50	6	B	C
ATOM	4231	C	LEU	B	153	0.117	34.983	0.918	1.00	25.04	6	B	C
ATOM	4232	O	LEU	B	153	-0.716	34.573	1.724	1.00	24.81	8	B	O
ATOM	4233	CB	LEU	B	153	-0.683	33.287	-0.782	1.00	23.62	6	B	C
ATOM	4234	CG	LEU	B	153	-1.010	32.952	-2.248	1.00	22.93	6	B	C
ATOM	4235	CD1	LEU	B	153	-1.430	31.514	-2.513	1.00	23.09	6	B	C
ATOM	4236	CD2	LEU	B	153	-2.072	33.908	-2.796	1.00	21.57	6	B	C
ATOM	4237	N	ASP	B	154	1.174	35.679	1.249	1.00	26.62	7	B	N
ATOM	4238	CA	ASP	B	154	1.525	36.080	2.602	1.00	29.67	6	B	C
ATOM	4239	C	ASP	B	154	1.630	34.938	3.622	1.00	29.00	6	B	C
ATOM	4240	O	ASP	B	154	1.157	35.084	4.743	1.00	26.16	8	B	O
ATOM	4241	CB	ASP	B	154	0.541	37.101	3.162	1.00	33.46	6	B	C
ATOM	4242	CG	ASP	B	154	0.337	38.334	2.318	1.00	35.19	6	B	C
ATOM	4243	OD1	ASP	B	154	1.289	38.883	1.764	1.00	35.44	8	B	O
ATOM	4244	OD2	ASP	B	154	-0.816	38.775	2.181	1.00	39.42	8	B	O
ATOM	4245	N	MET	B	155	2.269	33.841	3.238	1.00	25.88	7	B	N
ATOM	4246	CA	MET	B	155	2.536	32.727	4.113	1.00	25.22	6	B	C
ATOM	4247	C	MET	B	155	4.035	32.684	4.364	1.00	26.27	6	B	C
ATOM	4248	O	MET	B	155	4.760	33.288	3.570	1.00	28.41	8	B	O
ATOM	4249	CB	MET	B	155	2.020	31.426	3.507	1.00	22.50	6	B	C
ATOM	4250	CG	MET	B	155	0.474	31.601	3.541	1.00	22.72	6	B	C
ATOM	4251	SE	MET	B	155	-0.123	29.957	2.447	1.00	42.06	34	B	SE
ATOM	4252	CE2	MET	B	155	0.565	28.589	3.367	1.00	23.00	6	B	C
ATOM	4253	N	GLU	B	156	4.446	32.074	5.445	1.00	25.61	7	B	N
ATOM	4254	CA	GLU	B	156	5.852	32.019	5.813	1.00	26.29	6	B	C
ATOM	4255	C	GLU	B	156	6.181	30.593	6.238	1.00	22.47	6	B	C
ATOM	4256	O	GLU	B	156	5.306	29.924	6.772	1.00	18.14	8	B	O
ATOM	4257	CB	GLU	B	156	6.202	32.965	6.984	1.00	28.38	6	B	C

55/188

ATOM	4258	CG	GLU	B	156	5.960	34.426	6.656	1.00	34.54	6	B	C
ATOM	4259	CD	GLU	B	156	6.302	35.367	7.814	1.00	38.49	6	B	C
ATOM	4260	OE1	GLU	B	156	5.387	36.085	8.283	1.00	41.53	8	B	O
ATOM	4261	OE2	GLU	B	156	7.469	35.410	8.217	1.00	38.49	8	B	O
ATOM	4262	N	ILE	B	157	7.439	30.235	6.017	1.00	22.17	7	B	N
ATOM	4263	CA	ILE	B	157	7.805	28.859	6.410	1.00	22.09	6	B	C
ATOM	4264	C	ILE	B	157	9.237	28.900	6.932	1.00	21.46	6	B	C
ATOM	4265	O	ILE	B	157	10.045	29.724	6.499	1.00	20.55	8	B	O
ATOM	4266	CB	ILE	B	157	7.568	27.886	5.264	1.00	19.90	6	B	C
ATOM	4267	CG1	ILE	B	157	7.830	26.413	5.659	1.00	18.14	6	B	C
ATOM	4268	CG2	ILE	B	157	8.452	28.200	4.045	1.00	23.99	6	B	C
ATOM	4269	CD1	ILE	B	157	7.280	25.462	4.588	1.00	18.76	6	B	C
ATOM	4270	N	ALA	B	158	9.529	27.996	7.831	1.00	17.74	7	B	N
ATOM	4271	CA	ALA	B	158	10.854	27.866	8.425	1.00	19.46	6	B	C
ATOM	4272	C	ALA	B	158	11.072	26.422	8.833	1.00	19.33	6	B	C
ATOM	4273	O	ALA	B	158	10.085	25.700	8.986	1.00	19.17	8	B	O
ATOM	4274	CB	ALA	B	158	10.991	28.799	9.626	1.00	17.78	6	B	C
ATOM	4275	N	ASN	B	159	12.308	25.998	9.025	1.00	20.11	7	B	N
ATOM	4276	CA	ASN	B	159	12.575	24.668	9.565	1.00	20.64	6	B	C
ATOM	4277	C	ASN	B	159	13.704	24.831	10.614	1.00	21.65	6	B	C
ATOM	4278	O	ASN	B	159	14.532	25.753	10.513	1.00	20.21	8	B	O
ATOM	4279	CB	ASN	B	159	13.004	23.629	8.541	1.00	18.83	6	B	C
ATOM	4280	CG	ASN	B	159	14.449	23.754	8.069	1.00	21.79	6	B	C
ATOM	4281	OD1	ASN	B	159	14.740	24.481	7.111	1.00	23.46	8	B	O
ATOM	4282	ND2	ASN	B	159	15.363	23.022	8.690	1.00	19.92	7	B	N
ATOM	4283	N	HIS	B	160	13.824	23.868	11.515	1.00	21.12	7	B	N
ATOM	4284	CA	HIS	B	160	14.896	23.873	12.498	1.00	20.70	6	B	C
ATOM	4285	C	HIS	B	160	15.146	22.463	13.012	1.00	21.63	6	B	C
ATOM	4286	O	HIS	B	160	14.256	21.645	12.984	1.00	20.96	8	B	O
ATOM	4287	CB	HIS	B	160	14.701	24.851	13.654	1.00	20.08	6	B	C
ATOM	4288	CG	HIS	B	160	13.471	24.737	14.505	1.00	21.86	6	B	C
ATOM	4289	ND1	HIS	B	160	13.516	24.840	15.877	1.00	21.38	7	B	N
ATOM	4290	CD2	HIS	B	160	12.172	24.564	14.179	1.00	20.40	6	B	C
ATOM	4291	CE1	HIS	B	160	12.272	24.724	16.361	1.00	22.36	6	B	C
ATOM	4292	NE2	HIS	B	160	11.435	24.536	15.354	1.00	21.91	7	B	N
ATOM	4293	N	VAL	B	161	16.366	22.258	13.524	1.00	21.18	7	B	N
ATOM	4294	CA	VAL	B	161	16.697	20.980	14.153	1.00	21.87	6	B	C
ATOM	4295	C	VAL	B	161	16.232	21.043	15.609	1.00	23.38	6	B	C
ATOM	4296	O	VAL	B	161	16.660	21.935	16.364	1.00	21.04	8	B	O
ATOM	4297	CB	VAL	B	161	18.185	20.665	14.046	1.00	20.79	6	B	C
ATOM	4298	CG1	VAL	B	161	18.616	19.460	14.898	1.00	22.04	6	B	C
ATOM	4299	CG2	VAL	B	161	18.577	20.475	12.584	1.00	19.63	6	B	C
ATOM	4300	N	VAL	B	162	15.520	19.979	16.016	1.00	22.03	7	B	N
ATOM	4301	CA	VAL	B	162	15.054	19.966	17.392	1.00	22.42	6	B	C
ATOM	4302	C	VAL	B	162	15.718	18.848	18.185	1.00	21.72	6	B	C
ATOM	4303	O	VAL	B	162	15.643	18.822	19.428	1.00	20.74	8	B	O
ATOM	4304	CB	VAL	B	162	13.527	19.929	17.591	1.00	22.16	6	B	C
ATOM	4305	CG1	VAL	B	162	12.821	21.202	17.162	1.00	21.61	6	B	C
ATOM	4306	CG2	VAL	B	162	12.819	18.768	16.887	1.00	20.79	6	B	C
ATOM	4307	N	VAL	B	163	16.180	17.813	17.536	1.00	22.36	7	B	N
ATOM	4308	CA	VAL	B	163	16.978	16.748	18.072	1.00	20.14	6	B	C
ATOM	4309	C	VAL	B	163	18.146	16.559	17.078	1.00	23.52	6	B	C
ATOM	4310	O	VAL	B	163	17.891	16.324	15.872	1.00	19.67	8	B	O
ATOM	4311	CB	VAL	B	163	16.237	15.425	18.298	1.00	21.04	6	B	C
ATOM	4312	CG1	VAL	B	163	17.095	14.349	19.000	1.00	19.14	6	B	C
ATOM	4313	CG2	VAL	B	163	14.989	15.602	19.185	1.00	21.09	6	B	C
ATOM	4314	N	PHE	B	164	19.367	16.512	17.604	1.00	21.46	7	B	N
ATOM	4315	CA	PHE	B	164	20.523	16.306	16.740	1.00	22.67	6	B	C
ATOM	4316	C	PHE	B	164	21.257	15.110	17.347	1.00	23.69	6	B	C
ATOM	4317	O	PHE	B	164	21.836	15.256	18.406	1.00	22.70	8	B	O
ATOM	4318	CB	PHE	B	164	21.481	17.516	16.610	1.00	20.44	6	B	C
ATOM	4319	CG	PHE	B	164	22.248	17.495	15.299	1.00	20.63	6	B	C
ATOM	4320	CD1	PHE	B	164	22.368	18.661	14.552	1.00	20.32	6	B	C
ATOM	4321	CD2	PHE	B	164	22.860	16.334	14.829	1.00	18.66	6	B	C
ATOM	4322	CE1	PHE	B	164	23.063	18.698	13.352	1.00	19.58	6	B	C
ATOM	4323	CE2	PHE	B	164	23.520	16.362	13.600	1.00	18.84	6	B	C
ATOM	4324	CZ	PHE	B	164	23.623	17.537	12.875	1.00	18.14	6	B	C
ATOM	4325	N	GLY	B	165	21.098	13.928	16.768	1.00	24.36	7	B	N
ATOM	4326	CA	GLY	B	165	21.634	12.679	17.217	1.00	25.09	6	B	C
ATOM	4327	C	GLY	B	165	21.382	12.375	18.689	1.00	25.10	6	B	C
ATOM	4328	O	GLY	B	165	22.291	11.864	19.364	1.00	23.11	8	B	O
ATOM	4329	N	GLY	B	166	20.173	12.644	19.151	1.00	23.09	7	B	N
ATOM	4330	CA	GLY	B	166	19.840	12.351	20.544	1.00	26.41	6	B	C
ATOM	4331	C	GLY	B	166	19.954	13.605	21.405	1.00	26.35	6	B	C
ATOM	4332	O	GLY	B	166	19.325	13.662	22.464	1.00	26.85	8	B	O
ATOM	4333	N	LYS	B	167	20.630	14.647	20.947	1.00	25.58	7	B	N
ATOM	4334	CA	LYS	B	167	20.695	15.864	21.784	1.00	26.10	6	B	C
ATOM	4335	C	LYS	B	167	19.499	16.743	21.526	1.00	26.60	6	B	C
ATOM	4336	O	LYS	B	167	19.409	17.376	20.457	1.00	24.47	8	B	O

56/188

ATOM	4337	CB	LYS	B	167	22.062	16.541	21.571	1.00	27.44	6	B	C
ATOM	4338	CG	LYS	B	167	23.215	15.585	21.910	1.00	29.10	6	B	C
ATOM	4339	CD	LYS	B	167	24.561	16.279	21.801	1.00	30.64	6	B	C
ATOM	4340	CE	LYS	B	167	25.743	15.333	21.957	1.00	30.09	6	B	C
ATOM	4341	NZ	LYS	B	167	25.984	15.060	23.401	1.00	31.09	7	B	N
ATOM	4342	N	GLU	B	168	18.573	16.841	22.483	1.00	25.19	7	B	N
ATOM	4343	CA	GLU	B	168	17.372	17.626	22.318	1.00	27.77	6	B	C
ATOM	4344	C	GLU	B	168	17.568	19.109	22.544	1.00	27.85	6	B	C
ATOM	4345	O	GLU	B	168	18.449	19.484	23.308	1.00	27.33	8	B	O
ATOM	4346	CB	GLU	B	168	16.251	17.164	23.260	1.00	29.02	6	B	C
ATOM	4347	CG	GLU	B	168	16.072	15.654	23.269	1.00	32.90	6	B	C
ATOM	4348	CD	GLU	B	168	14.831	15.307	24.096	1.00	36.43	6	B	C
ATOM	4349	OE1	GLU	B	168	14.735	15.801	25.231	1.00	38.24	8	B	O
ATOM	4350	OE2	GLU	B	168	13.950	14.584	23.616	1.00	37.87	8	B	O
ATOM	4351	N	ILE	B	169	16.973	19.920	21.675	1.00	26.58	7	B	N
ATOM	4352	CA	ILE	B	169	17.101	21.367	21.806	1.00	28.61	6	B	C
ATOM	4353	C	ILE	B	169	16.013	21.947	22.707	1.00	29.44	6	B	C
ATOM	4354	O	ILE	B	169	14.830	21.668	22.555	1.00	27.95	8	B	O
ATOM	4355	CB	ILE	B	169	17.051	22.070	20.429	1.00	27.46	6	B	C
ATOM	4356	CG1	ILE	B	169	18.067	21.480	19.461	1.00	26.18	6	B	C
ATOM	4357	CG2	ILE	B	169	17.275	23.563	20.541	1.00	28.35	6	B	C
ATOM	4358	CD1	ILE	B	169	19.479	21.302	20.002	1.00	26.69	6	B	C
ATOM	4359	N	ASP	B	170	16.435	22.794	23.658	1.00	29.22	7	B	N
ATOM	4360	CA	ASP	B	170	15.429	23.469	24.501	1.00	31.08	6	B	C
ATOM	4361	C	ASP	B	170	14.936	24.685	23.730	1.00	29.08	6	B	C
ATOM	4362	O	ASP	B	170	15.616	25.706	23.710	1.00	26.06	8	B	O
ATOM	4363	CB	ASP	B	170	16.048	23.889	25.827	1.00	34.99	6	B	C
ATOM	4364	CG	ASP	B	170	15.080	24.403	26.866	1.00	37.76	6	B	C
ATOM	4365	OD1	ASP	B	170	13.852	24.380	26.636	1.00	38.72	8	B	O
ATOM	4366	OD2	ASP	B	170	15.581	24.848	27.936	1.00	40.09	8	B	O
ATOM	4367	N	VAL	B	171	13.795	24.544	23.046	1.00	28.46	7	B	N
ATOM	4368	CA	VAL	B	171	13.247	25.566	22.171	1.00	27.08	6	B	C
ATOM	4369	C	VAL	B	171	12.378	26.521	22.967	1.00	29.99	6	B	C
ATOM	4370	O	VAL	B	171	11.401	26.090	23.576	1.00	29.62	8	B	O
ATOM	4371	CB	VAL	B	171	12.335	24.971	21.068	1.00	27.52	6	B	C
ATOM	4372	CG1	VAL	B	171	11.626	26.045	20.250	1.00	24.82	6	B	C
ATOM	4373	CG2	VAL	B	171	13.162	24.077	20.130	1.00	22.10	6	B	C
ATOM	4374	N	PRO	B	172	12.720	27.789	22.926	1.00	31.40	7	B	N
ATOM	4375	CA	PRO	B	172	11.936	28.779	23.655	1.00	32.18	6	B	C
ATOM	4376	C	PRO	B	172	10.479	28.709	23.225	1.00	34.04	6	B	C
ATOM	4377	O	PRO	B	172	10.158	28.357	22.076	1.00	32.03	8	B	O
ATOM	4378	CB	PRO	B	172	12.662	30.054	23.317	1.00	32.25	6	B	C
ATOM	4379	CG	PRO	B	172	14.046	29.679	22.908	1.00	33.16	6	B	C
ATOM	4380	CD	PRO	B	172	13.885	28.353	22.222	1.00	32.13	6	B	C
ATOM	4381	N	GLU	B	173	9.540	29.054	24.114	1.00	35.48	7	B	N
ATOM	4382	CA	GLU	B	173	8.131	29.033	23.755	1.00	38.28	6	B	C
ATOM	4383	C	GLU	B	173	7.716	30.166	22.810	1.00	36.76	6	B	C
ATOM	4384	O	GLU	B	173	8.231	31.282	22.852	1.00	37.00	8	B	O
ATOM	4385	CB	GLU	B	173	7.189	29.233	24.939	1.00	42.11	6	B	C
ATOM	4386	CG	GLU	B	173	7.137	28.215	26.039	1.00	45.69	6	B	C
ATOM	4387	CD	GLU	B	173	6.312	26.981	25.722	1.00	48.38	6	B	C
ATOM	4388	OE1	GLU	B	173	5.113	27.005	26.074	1.00	48.78	8	B	O
ATOM	4389	OE2	GLU	B	173	6.848	26.006	25.141	1.00	50.81	8	B	O
ATOM	4390	N	ASP	B	174	6.655	29.901	22.059	1.00	34.91	7	B	N
ATOM	4391	CA	ASP	B	174	5.988	30.928	21.276	1.00	33.46	6	B	C
ATOM	4392	C	ASP	B	174	6.844	31.747	20.339	1.00	30.80	6	B	C
ATOM	4393	O	ASP	B	174	6.703	32.976	20.279	1.00	30.64	8	B	O
ATOM	4394	CB	ASP	B	174	5.289	31.871	22.280	1.00	36.07	6	B	C
ATOM	4395	CG	ASP	B	174	4.195	31.115	23.025	1.00	38.45	6	B	C
ATOM	4396	OD1	ASP	B	174	3.428	30.417	22.331	1.00	39.56	8	B	O
ATOM	4397	OD2	ASP	B	174	4.150	31.195	24.262	1.00	38.09	8	B	O
ATOM	4398	N	LEU	B	175	7.771	31.122	19.630	1.00	28.86	7	B	N
ATOM	4399	CA	LEU	B	175	8.563	31.818	18.639	1.00	27.78	6	B	C
ATOM	4400	C	LEU	B	175	7.667	31.966	17.397	1.00	26.83	6	B	C
ATOM	4401	O	LEU	B	175	6.892	31.035	17.105	1.00	25.71	8	B	O
ATOM	4402	CB	LEU	B	175	9.777	31.015	18.146	1.00	28.24	6	B	C
ATOM	4403	CG	LEU	B	175	10.895	30.822	19.196	1.00	28.96	6	B	C
ATOM	4404	CD1	LEU	B	175	12.081	30.104	18.562	1.00	28.91	6	B	C
ATOM	4405	CD2	LEU	B	175	11.354	32.157	19.770	1.00	25.62	6	B	C
ATOM	4406	N	THR	B	176	7.841	33.018	16.626	1.00	25.55	7	B	N
ATOM	4407	CA	THR	B	176	7.171	33.083	15.329	1.00	26.07	6	B	C
ATOM	4408	C	THR	B	176	7.943	32.288	14.270	1.00	25.24	6	B	C
ATOM	4409	O	THR	B	176	9.144	32.029	14.337	1.00	22.62	8	B	O
ATOM	4410	CB	THR	B	176	7.096	34.541	14.825	1.00	25.73	6	B	C
ATOM	4411	OG1	THR	B	176	8.451	34.942	14.572	1.00	25.55	8	B	O
ATOM	4412	CG2	THR	B	176	6.399	35.414	15.850	1.00	27.35	6	B	C
ATOM	4413	N	VAL	B	177	7.296	32.092	13.120	1.00	26.21	7	B	N
ATOM	4414	CA	VAL	B	177	7.996	31.411	12.021	1.00	24.83	6	B	C
ATOM	4415	C	VAL	B	177	9.252	32.154	11.631	1.00	24.30	6	B	C

57/188

ATOM	4416	O	VAL	B	177	10.287	31.538	11.362	1.00	22.79	8	B	O
ATOM	4417	CB	VAL	B	177	7.046	31.315	10.792	1.00	25.24	6	B	C
ATOM	4418	CG1	VAL	B	177	7.766	30.723	9.579	1.00	22.41	6	B	C
ATOM	4419	CG2	VAL	B	177	5.854	30.470	11.218	1.00	24.35	6	B	C
ATOM	4420	N	ALA	B	178	9.138	33.475	11.524	1.00	23.81	7	B	N
ATOM	4421	CA	ALA	B	178	10.242	34.306	11.083	1.00	24.88	6	B	C
ATOM	4422	C	ALA	B	178	11.397	34.311	12.070	1.00	24.02	6	B	C
ATOM	4423	O	ALA	B	178	12.581	34.380	11.750	1.00	23.43	8	B	O
ATOM	4424	CB	ALA	B	178	9.743	35.724	10.813	1.00	24.64	6	B	C
ATOM	4425	N	GLU	B	179	11.009	34.212	13.342	1.00	26.02	7	B	N
ATOM	4426	CA	GLU	B	179	12.015	34.134	14.407	1.00	25.63	6	B	C
ATOM	4427	C	GLU	B	179	12.750	32.813	14.280	1.00	24.80	6	B	C
ATOM	4428	O	GLU	B	179	13.988	32.704	14.373	1.00	24.63	8	B	O
ATOM	4429	CB	GLU	B	179	11.291	34.235	15.748	1.00	29.20	6	B	C
ATOM	4430	CG	GLU	B	179	11.294	35.625	16.372	1.00	30.29	6	B	C
ATOM	4431	CD	GLU	B	179	10.273	35.734	17.501	1.00	30.90	6	B	C
ATOM	4432	OE1	GLU	B	179	9.620	34.769	17.940	1.00	25.74	8	B	O
ATOM	4433	OE2	GLU	B	179	10.085	36.889	17.963	1.00	34.06	8	B	O
ATOM	4434	N	ILE	B	180	11.969	31.752	14.047	1.00	22.85	7	B	N
ATOM	4435	CA	ILE	B	180	12.613	30.442	13.841	1.00	22.90	6	B	C
ATOM	4436	C	ILE	B	180	13.576	30.519	12.666	1.00	21.68	6	B	C
ATOM	4437	O	ILE	B	180	14.710	30.008	12.743	1.00	23.20	8	B	O
ATOM	4438	CB	ILE	B	180	11.563	29.330	13.576	1.00	23.02	6	B	C
ATOM	4439	CG1	ILE	B	180	10.859	29.075	14.929	1.00	24.65	6	B	C
ATOM	4440	CG2	ILE	B	180	12.194	28.017	13.071	1.00	19.82	6	B	C
ATOM	4441	CD1	ILE	B	180	9.540	28.322	14.730	1.00	26.21	6	B	C
ATOM	4442	N	LYS	B	181	13.153	31.101	11.554	1.00	22.92	7	B	N
ATOM	4443	CA	LYS	B	181	14.028	31.138	10.368	1.00	22.72	6	B	C
ATOM	4444	C	LYS	B	181	15.314	31.889	10.621	1.00	24.64	6	B	C
ATOM	4445	O	LYS	B	181	16.463	31.504	10.374	1.00	23.98	8	B	O
ATOM	4446	CB	LYS	B	181	13.233	31.791	9.232	1.00	23.11	6	B	C
ATOM	4447	CG	LYS	B	181	14.032	31.967	7.948	1.00	25.23	6	B	C
ATOM	4448	CD	LYS	B	181	13.103	32.494	6.868	1.00	26.82	6	B	C
ATOM	4449	CE	LYS	B	181	13.787	32.693	5.526	1.00	26.86	6	B	C
ATOM	4450	NZ	LYS	B	181	14.439	31.508	4.948	1.00	27.19	7	B	N
ATOM	4451	N	GLN	B	182	15.135	33.096	11.150	1.00	25.87	7	B	N
ATOM	4452	CA	GLN	B	182	16.296	33.918	11.489	1.00	28.69	6	B	C
ATOM	4453	C	GLN	B	182	17.217	33.253	12.498	1.00	27.59	6	B	C
ATOM	4454	O	GLN	B	182	18.429	33.235	12.303	1.00	28.15	8	B	O
ATOM	4455	CB	GLN	B	182	15.798	35.244	12.085	1.00	32.41	6	B	C
ATOM	4456	CG	GLN	B	182	16.939	36.250	12.193	1.00	39.81	6	B	C
ATOM	4457	CD	GLN	B	182	16.457	37.686	12.189	1.00	44.53	6	B	C
ATOM	4458	OE1	GLN	B	182	16.780	38.455	11.262	1.00	47.73	8	B	O
ATOM	4459	NE2	GLN	B	182	15.691	38.038	13.217	1.00	45.78	7	B	N
ATOM	4460	N	ARG	B	183	16.715	32.731	13.624	1.00	25.75	7	B	N
ATOM	4461	CA	ARG	B	183	17.637	32.170	14.609	1.00	25.30	6	B	C
ATOM	4462	C	ARG	B	183	18.314	30.914	14.077	1.00	25.01	6	B	C
ATOM	4463	O	ARG	B	183	19.547	30.793	14.181	1.00	24.39	8	B	O
ATOM	4464	CB	ARG	B	183	16.934	31.905	15.964	1.00	24.08	6	B	C
ATOM	4465	CG	ARG	B	183	16.470	33.175	16.662	1.00	26.43	6	B	C
ATOM	4466	CD	ARG	B	183	15.778	32.870	17.999	1.00	26.51	6	B	C
ATOM	4467	NE	ARG	B	183	14.983	34.039	18.438	1.00	28.29	7	B	N
ATOM	4468	CZ	ARG	B	183	14.474	34.125	19.675	1.00	28.77	6	B	C
ATOM	4469	NH1	ARG	B	183	14.741	33.140	20.548	1.00	27.66	7	B	N
ATOM	4470	NH2	ARG	B	183	13.727	35.157	20.037	1.00	28.82	7	B	N
ATOM	4471	N	ALA	B	184	17.528	30.034	13.405	1.00	23.96	7	B	N
ATOM	4472	CA	ALA	B	184	18.196	28.824	12.871	1.00	23.53	6	B	C
ATOM	4473	C	ALA	B	184	19.302	29.164	11.868	1.00	25.63	6	B	C
ATOM	4474	O	ALA	B	184	20.349	28.537	11.747	1.00	23.64	8	B	O
ATOM	4475	CB	ALA	B	184	17.129	27.969	12.193	1.00	22.80	6	B	C
ATOM	4476	N	ALA	B	185	19.129	30.214	11.062	1.00	28.36	7	B	N
ATOM	4477	CA	ALA	B	185	20.139	30.579	10.070	1.00	28.88	6	B	C
ATOM	4478	C	ALA	B	185	21.414	31.121	10.693	1.00	29.99	6	B	C
ATOM	4479	O	ALA	B	185	22.434	31.253	9.997	1.00	31.00	8	B	O
ATOM	4480	CB	ALA	B	185	19.574	31.590	9.066	1.00	28.29	6	B	C
ATOM	4481	N	GLN	B	186	21.430	31.452	11.978	1.00	30.98	7	B	N
ATOM	4482	CA	GLN	B	186	22.657	31.982	12.574	1.00	32.38	6	B	C
ATOM	4483	C	GLN	B	186	23.445	30.849	13.201	1.00	31.24	6	B	C
ATOM	4484	O	GLN	B	186	24.467	31.060	13.853	1.00	31.64	8	B	O
ATOM	4485	CB	GLN	B	186	22.313	33.094	13.569	1.00	34.18	6	B	C
ATOM	4486	CG	GLN	B	186	21.793	34.349	12.851	1.00	37.52	6	B	C
ATOM	4487	CD	GLN	B	186	20.983	35.268	13.742	1.00	41.43	6	B	C
ATOM	4488	OE1	GLN	B	186	20.634	36.413	13.407	1.00	41.62	8	B	O
ATOM	4489	NE2	GLN	B	186	20.621	34.738	14.918	1.00	43.46	7	B	N
ATOM	4490	N	SER	B	187	22.918	29.640	13.110	1.00	28.53	7	B	N
ATOM	4491	CA	SER	B	187	23.545	28.475	13.698	1.00	28.86	6	B	C
ATOM	4492	C	SER	B	187	24.139	27.601	12.600	1.00	30.15	6	B	C
ATOM	4493	O	SER	B	187	23.516	27.488	11.526	1.00	30.86	8	B	O
ATOM	4494	CB	SER	B	187	22.488	27.641	14.447	1.00	27.15	6	B	C

58/188

ATOM	4495	OG	SER B 187	23.038	26.335	14.613	1.00	23.90	8	B	O
ATOM	4496	N	GLU B 188	25.239	26.903	12.829	1.00	28.43	7	B	N
ATOM	4497	CA	GLU B 188	25.780	26.049	11.779	1.00	29.17	6	B	C
ATOM	4498	C	GLU B 188	25.058	24.700	11.756	1.00	27.14	6	B	C
ATOM	4499	O	GLU B 188	25.283	23.928	10.830	1.00	27.03	8	B	O
ATOM	4500	CB	GLU B 188	27.290	25.850	11.861	1.00	31.97	6	B	C
ATOM	4501	CG	GLU B 188	28.141	27.121	11.777	1.00	34.75	6	B	C
ATOM	4502	CD	GLU B 188	29.578	26.766	12.142	1.00	35.76	6	B	C
ATOM	4503	OE1	GLU B 188	30.242	25.987	11.413	1.00	36.90	8	B	O
ATOM	4504	OE2	GLU B 188	30.030	27.193	13.221	1.00	38.57	8	B	O
ATOM	4505	N	VAL B 189	24.214	24.424	12.754	1.00	24.53	7	B	N
ATOM	4506	CA	VAL B 189	23.453	23.198	12.793	1.00	23.13	6	B	C
ATOM	4507	C	VAL B 189	21.957	23.435	12.878	1.00	22.50	6	B	C
ATOM	4508	O	VAL B 189	21.253	22.546	13.355	1.00	20.65	8	B	O
ATOM	4509	CB	VAL B 189	23.920	22.221	13.896	1.00	23.97	6	B	C
ATOM	4510	CG1	VAL B 189	25.281	21.682	13.440	1.00	25.10	6	B	C
ATOM	4511	CG2	VAL B 189	24.024	22.880	15.252	1.00	22.76	6	B	C
ATOM	4512	N	SER B 190	21.531	24.608	12.419	1.00	19.58	7	B	N
ATOM	4513	CA	SER B 190	20.126	24.937	12.322	1.00	22.81	6	B	C
ATOM	4514	C	SER B 190	19.313	24.825	13.597	1.00	24.13	6	B	C
ATOM	4515	O	SER B 190	18.111	24.567	13.482	1.00	22.57	8	B	O
ATOM	4516	CB	SER B 190	19.464	24.019	11.246	1.00	23.49	6	B	C
ATOM	4517	OG	SER B 190	20.023	24.419	9.999	1.00	23.61	8	B	O
ATOM	4518	N	ILE B 191	19.957	25.117	14.741	1.00	22.45	7	B	N
ATOM	4519	CA	ILE B 191	19.235	25.054	16.015	1.00	21.37	6	B	C
ATOM	4520	C	ILE B 191	18.908	26.490	16.413	1.00	23.35	6	B	C
ATOM	4521	O	ILE B 191	19.713	27.399	16.148	1.00	22.43	8	B	O
ATOM	4522	CB	ILE B 191	19.955	24.282	17.122	1.00	21.47	6	B	C
ATOM	4523	CG1	ILE B 191	21.324	24.895	17.448	1.00	18.40	6	B	C
ATOM	4524	CG2	ILE B 191	20.040	22.799	16.781	1.00	17.37	6	B	C
ATOM	4525	CD1	ILE B 191	22.186	24.053	18.392	1.00	20.18	6	B	C
ATOM	4526	N	VAL B 192	17.739	26.730	17.008	1.00	22.51	7	B	N
ATOM	4527	CA	VAL B 192	17.412	28.132	17.321	1.00	24.37	6	B	C
ATOM	4528	C	VAL B 192	17.988	28.636	18.646	1.00	26.04	6	B	C
ATOM	4529	O	VAL B 192	17.861	29.830	18.919	1.00	25.84	8	B	O
ATOM	4530	CB	VAL B 192	15.901	28.362	17.282	1.00	25.44	6	B	C
ATOM	4531	CG1	VAL B 192	15.283	28.015	15.898	1.00	22.60	6	B	C
ATOM	4532	CG2	VAL B 192	15.224	27.496	18.350	1.00	24.50	6	B	C
ATOM	4533	N	ASN B 193	18.445	27.737	19.468	1.00	25.72	7	B	N
ATOM	4534	CA	ASN B 193	19.037	28.072	20.793	1.00	27.86	6	B	C
ATOM	4535	C	ASN B 193	20.436	27.460	20.732	1.00	26.98	6	B	C
ATOM	4536	O	ASN B 193	20.488	26.234	20.639	1.00	24.91	8	B	O
ATOM	4537	CB	ASN B 193	18.250	27.358	21.882	1.00	27.62	6	B	C
ATOM	4538	CG	ASN B 193	18.931	27.356	23.246	1.00	28.19	6	B	C
ATOM	4539	OD1	ASN B 193	20.142	27.465	23.408	1.00	24.25	8	B	O
ATOM	4540	ND2	ASN B 193	18.037	27.210	24.228	1.00	28.94	7	B	N
ATOM	4541	N	GLN B 194	21.486	28.276	20.727	1.00	27.41	7	B	N
ATOM	4542	CA	GLN B 194	22.837	27.775	20.598	1.00	28.62	6	B	C
ATOM	4543	C	GLN B 194	23.568	27.304	21.860	1.00	28.86	6	B	C
ATOM	4544	O	GLN B 194	24.771	26.982	21.785	1.00	25.71	8	B	O
ATOM	4545	CB	GLN B 194	23.644	28.896	19.881	1.00	30.58	6	B	C
ATOM	4546	CG	GLN B 194	23.075	29.243	18.501	1.00	32.72	6	B	C
ATOM	4547	CD	GLN B 194	24.022	29.912	17.537	1.00	33.95	6	B	C
ATOM	4548	OE1	GLN B 194	23.609	30.553	16.566	1.00	35.11	8	B	O
ATOM	4549	NE2	GLN B 194	25.340	29.824	17.709	1.00	33.92	7	B	N
ATOM	4550	N	GLU B 195	22.892	27.107	22.969	1.00	29.39	7	B	N
ATOM	4551	CA	GLU B 195	23.573	26.583	24.155	1.00	32.65	6	B	C
ATOM	4552	C	GLU B 195	24.291	25.273	23.845	1.00	32.30	6	B	C
ATOM	4553	O	GLU B 195	25.415	25.128	24.346	1.00	30.89	8	B	O
ATOM	4554	CB	GLU B 195	22.718	26.403	25.405	1.00	35.04	6	B	C
ATOM	4555	CG	AGLU B 195	21.541	25.483	25.440	0.50	35.24	6	B	C
ATOM	4556	CG	BGLU B 195	23.559	25.956	26.582	0.50	36.98	6	B	C
ATOM	4557	CD	AGLU B 195	20.567	25.665	26.589	0.50	35.43	6	B	C
ATOM	4558	CD	BGLU B 195	22.864	25.556	27.851	0.50	37.57	6	B	C
ATOM	4559	OE1AGLU	B 195	20.820	26.429	27.547	0.50	35.20	8	B	O
ATOM	4560	OE1BGLU	B 195	21.635	25.396	27.918	0.50	36.77	8	B	O
ATOM	4561	OE2AGLU	B 195	19.488	25.040	26.574	0.50	32.69	8	B	O
ATOM	4562	OE2BGLU	B 195	23.638	25.387	28.828	0.50	39.29	8	B	O
ATOM	4563	N	ARG B 196	23.748	24.350	23.050	1.00	29.81	7	B	N
ATOM	4564	CA	ARG B 196	24.480	23.112	22.776	1.00	27.61	6	B	C
ATOM	4565	C	ARG B 196	25.181	23.117	21.421	1.00	27.32	6	B	C
ATOM	4566	O	ARG B 196	25.531	22.033	20.917	1.00	27.50	8	B	O
ATOM	4567	CB	ARG B 196	23.526	21.898	22.861	1.00	26.87	6	B	C
ATOM	4568	CG	ARG B 196	22.709	21.855	24.158	1.00	25.53	6	B	C
ATOM	4569	CD	ARG B 196	21.825	20.634	24.259	1.00	26.87	6	B	C
ATOM	4570	NE	ARG B 196	22.539	19.416	24.619	1.00	27.31	7	B	N
ATOM	4571	CZ	ARG B 196	21.982	18.237	24.844	1.00	29.26	6	B	C
ATOM	4572	NH1	ARG B 196	20.650	18.100	24.725	1.00	30.69	7	B	N
ATOM	4573	NH2	ARG B 196	22.737	17.195	25.181	1.00	27.87	7	B	N

59/188

ATOM	4574	N	GLU	B	197	25.354	24.240	20.748	1.00	27.24	7	B	N
ATOM	4575	CA	GLU	B	197	25.959	24.204	19.408	1.00	27.13	6	B	C
ATOM	4576	C	GLU	B	197	27.344	23.579	19.403	1.00	27.44	6	B	C
ATOM	4577	O	GLU	B	197	27.714	22.742	18.566	1.00	26.03	8	B	O
ATOM	4578	CB	GLU	B	197	26.048	25.641	18.876	1.00	29.33	6	B	C
ATOM	4579	CG	GLU	B	197	26.709	25.770	17.492	1.00	30.43	6	B	C
ATOM	4580	CD	GLU	B	197	25.756	26.263	16.411	1.00	31.53	6	B	C
ATOM	4581	OE1	GLU	B	197	24.520	26.324	16.618	1.00	30.49	8	B	O
ATOM	4582	OE2	GLU	B	197	26.225	26.630	15.303	1.00	29.15	8	B	O
ATOM	4583	N	GLN	B	198	28.193	24.046	20.354	1.00	26.66	7	B	N
ATOM	4584	CA	GLN	B	198	29.580	23.526	20.329	1.00	26.93	6	B	C
ATOM	4585	C	GLN	B	198	29.602	22.049	20.659	1.00	23.55	6	B	C
ATOM	4586	O	GLN	B	198	30.339	21.208	20.146	1.00	22.83	8	B	O
ATOM	4587	CB	GLN	B	198	30.415	24.359	21.338	1.00	30.83	6	B	C
ATOM	4588	CG	GLN	B	198	31.886	23.939	21.316	1.00	32.56	6	B	C
ATOM	4589	CD	GLN	B	198	32.458	24.297	19.943	1.00	33.65	6	B	C
ATOM	4590	OE1	GLN	B	198	32.294	25.447	19.519	1.00	35.46	8	B	O
ATOM	4591	NE2	GLN	B	198	33.027	23.315	19.276	1.00	32.99	7	B	N
ATOM	4592	N	GLU	B	199	28.715	21.660	21.563	1.00	23.55	7	B	N
ATOM	4593	CA	GLU	B	199	28.562	20.279	21.989	1.00	23.98	6	B	C
ATOM	4594	C	GLU	B	199	28.132	19.414	20.799	1.00	24.96	6	B	C
ATOM	4595	O	GLU	B	199	28.725	18.363	20.544	1.00	24.26	8	B	O
ATOM	4596	CB	GLU	B	199	27.485	20.242	23.085	1.00	25.90	6	B	C
ATOM	4597	CG	GLU	B	199	27.324	18.847	23.692	1.00	26.24	6	B	C
ATOM	4598	CD	GLU	B	199	26.039	18.667	24.457	1.00	27.63	6	B	C
ATOM	4599	OE1	GLU	B	199	25.432	19.664	24.887	1.00	26.47	8	B	O
ATOM	4600	OE2	GLU	B	199	25.585	17.507	24.636	1.00	29.43	8	B	O
ATOM	4601	N	ILE	B	200	27.225	19.929	19.963	1.00	25.91	7	B	N
ATOM	4602	CA	ILE	B	200	26.747	19.191	18.778	1.00	24.48	6	B	C
ATOM	4603	C	ILE	B	200	27.872	19.138	17.737	1.00	22.66	6	B	C
ATOM	4604	O	ILE	B	200	28.133	18.114	17.120	1.00	22.32	8	B	O
ATOM	4605	CB	ILE	B	200	25.554	19.878	18.098	1.00	27.54	6	B	C
ATOM	4606	CG1	ILE	B	200	24.295	20.160	18.961	1.00	27.82	6	B	C
ATOM	4607	CG2	ILE	B	200	25.109	19.134	16.826	1.00	24.88	6	B	C
ATOM	4608	CD1	ILE	B	200	23.766	18.909	19.564	1.00	28.42	6	B	C
ATOM	4609	N	LYS	B	201	28.611	20.237	17.563	1.00	23.22	7	B	N
ATOM	4610	CA	LYS	B	201	29.710	20.158	16.570	1.00	24.04	6	B	C
ATOM	4611	C	LYS	B	201	30.791	19.149	16.978	1.00	24.22	6	B	C
ATOM	4612	O	LYS	B	201	31.359	18.415	16.181	1.00	22.35	8	B	O
ATOM	4613	CB	LYS	B	201	30.295	21.547	16.372	1.00	25.83	6	B	C
ATOM	4614	CG	LYS	B	201	29.312	22.453	15.614	1.00	29.40	6	B	C
ATOM	4615	CD	LYS	B	201	29.853	23.876	15.481	1.00	31.89	6	B	C
ATOM	4616	CE	LYS	B	201	31.296	23.852	14.951	1.00	34.30	6	B	C
ATOM	4617	NZ	LYS	B	201	31.832	25.242	14.886	1.00	37.20	7	B	N
ATOM	4618	N	ASP	B	202	31.171	19.187	18.257	1.00	25.71	7	B	N
ATOM	4619	CA	ASP	B	202	32.135	18.264	18.827	1.00	27.27	6	B	C
ATOM	4620	C	ASP	B	202	31.701	16.807	18.696	1.00	25.94	6	B	C
ATOM	4621	O	ASP	B	202	32.514	15.927	18.387	1.00	26.57	8	B	O
ATOM	4622	CB	ASP	B	202	32.335	18.574	20.314	1.00	30.33	6	B	C
ATOM	4623	CG	ASP	B	202	33.103	19.872	20.490	1.00	31.86	6	B	C
ATOM	4624	OD1	ASP	B	202	33.651	20.446	19.535	1.00	34.07	8	B	O
ATOM	4625	OD2	ASP	B	202	33.093	20.334	21.642	1.00	34.47	8	B	O
ATOM	4626	N	TYR	B	203	30.409	16.577	18.880	1.00	24.41	7	B	N
ATOM	4627	CA	TYR	B	203	29.845	15.245	18.753	1.00	25.24	6	B	C
ATOM	4628	C	TYR	B	203	29.909	14.763	17.304	1.00	23.28	6	B	C
ATOM	4629	O	TYR	B	203	30.344	13.657	17.020	1.00	22.18	8	B	O
ATOM	4630	CB	TYR	B	203	28.388	15.278	19.272	1.00	28.28	6	B	C
ATOM	4631	CG	TYR	B	203	27.730	13.917	19.277	1.00	30.33	6	B	C
ATOM	4632	CD1	TYR	B	203	28.381	12.817	19.831	1.00	32.44	6	B	C
ATOM	4633	CD2	TYR	B	203	26.465	13.703	18.758	1.00	31.69	6	B	C
ATOM	4634	CE1	TYR	B	203	27.811	11.542	19.852	1.00	32.21	6	B	C
ATOM	4635	CE2	TYR	B	203	25.880	12.438	18.731	1.00	31.07	6	B	C
ATOM	4636	CZ	TYR	B	203	26.557	11.379	19.274	1.00	31.75	6	B	C
ATOM	4637	OH	TYR	B	203	26.001	10.134	19.332	1.00	32.65	8	B	O
ATOM	4638	N	ILE	B	204	29.521	15.613	16.368	1.00	24.13	7	B	N
ATOM	4639	CA	ILE	B	204	29.640	15.288	14.931	1.00	22.12	6	B	C
ATOM	4640	C	ILE	B	204	31.085	14.932	14.584	1.00	24.45	6	B	C
ATOM	4641	O	ILE	B	204	31.325	13.940	13.898	1.00	23.72	8	B	O
ATOM	4642	CB	ILE	B	204	29.114	16.479	14.108	1.00	21.58	6	B	C
ATOM	4643	CG1	ILE	B	204	27.609	16.683	14.367	1.00	20.57	6	B	C
ATOM	4644	CG2	ILE	B	204	29.370	16.262	12.616	1.00	22.01	6	B	C
ATOM	4645	CD1	ILE	B	204	27.008	17.968	13.852	1.00	19.18	6	B	C
ATOM	4646	N	ASP	B	205	32.049	15.689	15.105	1.00	26.43	7	B	N
ATOM	4647	CA	ASP	B	205	33.474	15.385	14.806	1.00	28.64	6	B	C
ATOM	4648	C	ASP	B	205	33.814	14.001	15.347	1.00	28.00	6	B	C
ATOM	4649	O	ASP	B	205	34.501	13.206	14.700	1.00	28.47	8	B	O
ATOM	4650	CB	ASP	B	205	34.450	16.394	15.421	1.00	27.99	6	B	C
ATOM	4651	CG	ASP	B	205	34.365	17.799	14.868	1.00	30.28	6	B	C
ATOM	4652	OD1	ASP	B	205	33.725	18.009	13.803	1.00	30.71	8	B	O

60/188

ATOM	4653	OD2	ASP	B	205	34.904	18.777	15.433	1.00	27.83	8	B	O
ATOM	4654	N	GLN	B	206	33.249	13.724	16.523	1.00	26.62	7	B	N
ATOM	4655	CA	GLN	B	206	33.525	12.426	17.144	1.00	28.11	6	B	C
ATOM	4656	C	GLN	B	206	32.975	11.290	16.285	1.00	26.57	6	B	C
ATOM	4657	O	GLN	B	206	33.679	10.324	15.985	1.00	25.55	8	B	O
ATOM	4658	CB	GLN	B	206	33.126	12.371	18.609	1.00	29.09	6	B	C
ATOM	4659	CG	GLN	B	206	33.618	11.130	19.386	1.00	32.01	6	B	C
ATOM	4660	CD	GLN	B	206	35.138	10.932	19.243	1.00	32.86	6	B	C
ATOM	4661	OE1	GLN	B	206	35.930	11.862	19.358	1.00	31.27	8	B	O
ATOM	4662	NE2	GLN	B	206	35.560	9.706	18.958	1.00	33.01	7	B	N
ATOM	4663	N	ILE	B	207	31.730	11.418	15.848	1.00	26.40	7	B	N
ATOM	4664	CA	ILE	B	207	31.064	10.405	15.038	1.00	24.66	6	B	C
ATOM	4665	C	ILE	B	207	31.890	10.162	13.797	1.00	24.84	6	B	C
ATOM	4666	O	ILE	B	207	32.147	9.039	13.386	1.00	25.06	8	B	O
ATOM	4667	CB	ILE	B	207	29.626	10.891	14.684	1.00	25.60	6	B	C
ATOM	4668	CG1	ILE	B	207	28.729	10.973	15.921	1.00	23.80	6	B	C
ATOM	4669	CG2	ILE	B	207	29.029	10.009	13.587	1.00	23.65	6	B	C
ATOM	4670	CD1	ILE	B	207	28.407	9.659	16.601	1.00	23.07	6	B	C
ATOM	4671	N	LYS	B	208	32.374	11.274	13.231	1.00	25.49	7	B	N
ATOM	4672	CA	LYS	B	208	33.190	11.153	12.030	1.00	28.72	6	B	C
ATOM	4673	C	LYS	B	208	34.454	10.348	12.269	1.00	27.70	6	B	C
ATOM	4674	O	LYS	B	208	34.739	9.340	11.609	1.00	27.46	8	B	O
ATOM	4675	CB	LYS	B	208	33.536	12.553	11.505	1.00	30.63	6	B	C
ATOM	4676	CG	LYS	B	208	34.154	12.467	10.108	1.00	32.55	6	B	C
ATOM	4677	CD	LYS	B	208	34.468	13.896	9.651	1.00	35.53	6	B	C
ATOM	4678	CE	LYS	B	208	35.264	13.846	8.347	1.00	36.63	6	B	C
ATOM	4679	NZ	LYS	B	208	35.634	15.231	7.931	1.00	38.16	7	B	N
ATOM	4680	N	ARG	B	209	35.217	10.800	13.261	1.00	28.99	7	B	N
ATOM	4681	CA	ARG	B	209	36.506	10.084	13.509	1.00	28.43	6	B	C
ATOM	4682	C	ARG	B	209	36.193	8.635	13.806	1.00	27.46	6	B	C
ATOM	4683	O	ARG	B	209	37.000	7.796	13.403	1.00	28.10	8	B	O
ATOM	4684	CB	ARG	B	209	37.349	10.895	14.473	1.00	31.27	6	B	C
ATOM	4685	CG	ARG	B	209	37.036	10.899	15.930	1.00	31.94	6	B	C
ATOM	4686	CD	ARG	B	209	38.113	11.616	16.769	1.00	34.23	6	B	C
ATOM	4687	NE	ARG	B	209	38.090	13.041	16.675	1.00	33.86	7	B	N
ATOM	4688	CZ	ARG	B	209	37.517	14.082	17.215	1.00	33.76	6	B	C
ATOM	4689	NH1	ARG	B	209	37.831	15.293	16.716	1.00	31.99	7	B	N
ATOM	4690	NH2	ARG	B	209	36.674	14.034	18.223	1.00	32.61	7	B	N
ATOM	4691	N	ASP	B	210	35.081	8.280	14.413	1.00	26.82	7	B	N
ATOM	4692	CA	ASP	B	210	34.726	6.885	14.684	1.00	29.19	6	B	C
ATOM	4693	C	ASP	B	210	34.120	6.140	13.487	1.00	30.19	6	B	C
ATOM	4694	O	ASP	B	210	33.899	4.915	13.499	1.00	30.03	8	B	O
ATOM	4695	CB	ASP	B	210	33.737	6.868	15.852	1.00	29.50	6	B	C
ATOM	4696	CG	ASP	B	210	34.364	7.052	17.223	1.00	30.79	6	B	C
ATOM	4697	OD1	ASP	B	210	35.568	6.717	17.362	1.00	32.21	8	B	O
ATOM	4698	OD2	ASP	B	210	33.688	7.510	18.172	1.00	28.34	8	B	O
ATOM	4699	N	GLY	B	211	33.962	6.805	12.366	1.00	28.36	7	B	N
ATOM	4700	CA	GLY	B	211	33.470	6.154	11.143	1.00	31.24	6	B	C
ATOM	4701	C	GLY	B	211	31.999	5.750	11.279	1.00	28.95	6	B	C
ATOM	4702	O	GLY	B	211	31.582	4.752	10.707	1.00	27.16	8	B	O
ATOM	4703	N	ASP	B	212	31.255	6.522	12.059	1.00	26.90	7	B	N
ATOM	4704	CA	ASP	B	212	29.847	6.284	12.327	1.00	26.16	6	B	C
ATOM	4705	C	ASP	B	212	29.015	7.435	11.735	1.00	25.19	6	B	C
ATOM	4706	O	ASP	B	212	29.585	8.249	10.972	1.00	22.55	8	B	O
ATOM	4707	CB	ASP	B	212	29.624	6.188	13.852	1.00	27.90	6	B	C
ATOM	4708	CG	ASP	B	212	28.502	5.211	14.153	1.00	30.02	6	B	C
ATOM	4709	OD1	ASP	B	212	27.554	5.034	13.332	1.00	29.60	8	B	O
ATOM	4710	OD2	ASP	B	212	28.568	4.588	15.225	1.00	29.66	8	B	O
ATOM	4711	N	THR	B	213	27.731	7.513	12.056	1.00	21.32	7	B	N
ATOM	4712	CA	THR	B	213	26.886	8.621	11.534	1.00	21.80	6	B	C
ATOM	4713	C	THR	B	213	25.755	8.879	12.537	1.00	22.00	6	B	C
ATOM	4714	O	THR	B	213	25.575	8.039	13.434	1.00	21.32	8	B	O
ATOM	4715	CB	THR	B	213	26.203	8.256	10.211	1.00	20.56	6	B	C
ATOM	4716	OG1	THR	B	213	25.343	7.119	10.396	1.00	20.07	8	B	O
ATOM	4717	CG2	THR	B	213	27.196	7.744	9.173	1.00	18.43	6	B	C
ATOM	4718	N	ILE	B	214	25.049	9.975	12.391	1.00	21.21	7	B	N
ATOM	4719	CA	ILE	B	214	23.895	10.295	13.201	1.00	22.72	6	B	C
ATOM	4720	C	ILE	B	214	22.842	10.980	12.316	1.00	22.40	6	B	C
ATOM	4721	O	ILE	B	214	23.115	11.519	11.238	1.00	21.62	8	B	O
ATOM	4722	CB	ILE	B	214	24.176	11.167	14.437	1.00	22.70	6	B	C
ATOM	4723	CG1	ILE	B	214	24.973	12.414	14.087	1.00	24.48	6	B	C
ATOM	4724	CG2	ILE	B	214	24.917	10.362	15.516	1.00	21.93	6	B	C
ATOM	4725	CD1	ILE	B	214	25.245	13.416	15.198	1.00	22.05	6	B	C
ATOM	4726	N	GLY	B	215	21.601	10.977	12.774	1.00	20.09	7	B	N
ATOM	4727	CA	GLY	B	215	20.477	11.668	12.147	1.00	19.31	6	B	C
ATOM	4728	C	GLY	B	215	19.877	12.571	13.225	1.00	21.61	6	B	C
ATOM	4729	O	GLY	B	215	20.643	13.209	13.972	1.00	21.91	8	B	O
ATOM	4730	N	GLY	B	216	18.566	12.656	13.336	1.00	20.30	7	B	N
ATOM	4731	CA	GLY	B	216	17.891	13.521	14.293	1.00	19.91	6	B	C

61/188

ATOM	4732	C	GLY B 216	16.456	13.833	13.826	1.00	21.62	6	B	C
ATOM	4733	O	GLY B 216	15.763	13.109	13.091	1.00	19.84	8	B	O
ATOM	4734	N	VAL B 217	15.911	14.920	14.364	1.00	18.17	7	B	N
ATOM	4735	CA	VAL B 217	14.548	15.303	14.192	1.00	19.11	6	B	C
ATOM	4736	C	VAL B 217	14.519	16.774	13.752	1.00	18.44	6	B	C
ATOM	4737	O	VAL B 217	15.151	17.560	14.445	1.00	18.17	8	B	O
ATOM	4738	CB	VAL B 217	13.677	15.081	15.458	1.00	17.38	6	B	C
ATOM	4739	CG1	VAL B 217	12.204	15.404	15.228	1.00	15.08	6	B	C
ATOM	4740	CG2	VAL B 217	13.806	13.598	15.888	1.00	17.17	6	B	C
ATOM	4741	N	VAL B 218	13.783	17.016	12.688	1.00	18.25	7	B	N
ATOM	4742	CA	VAL B 218	13.646	18.394	12.222	1.00	18.19	6	B	C
ATOM	4743	C	VAL B 218	12.195	18.838	12.266	1.00	18.80	6	B	C
ATOM	4744	O	VAL B 218	11.309	18.002	12.093	1.00	21.00	8	B	O
ATOM	4745	CB	VAL B 218	14.208	18.575	10.810	1.00	18.47	6	B	C
ATOM	4746	CG1	VAL B 218	15.739	18.635	10.862	1.00	19.27	6	B	C
ATOM	4747	CG2	VAL B 218	13.772	17.458	9.865	1.00	16.84	6	B	C
ATOM	4748	N	GLU B 219	11.993	20.149	12.422	1.00	17.19	7	B	N
ATOM	4749	CA	GLU B 219	10.610	20.609	12.518	1.00	17.69	6	B	C
ATOM	4750	C	GLU B 219	10.395	21.694	11.477	1.00	19.22	6	B	C
ATOM	4751	O	GLU B 219	11.276	22.551	11.315	1.00	19.79	8	B	O
ATOM	4752	CB	GLU B 219	10.320	21.045	13.964	1.00	17.18	6	B	C
ATOM	4753	CG	GLU B 219	8.939	21.741	14.144	1.00	19.10	6	B	C
ATOM	4754	CD	GLU B 219	8.736	22.076	15.621	1.00	21.22	6	B	C
ATOM	4755	OE1	GLU B 219	8.416	21.160	16.423	1.00	21.88	8	B	O
ATOM	4756	OE2	GLU B 219	8.915	23.260	15.961	1.00	22.41	8	B	O
ATOM	4757	N	THR B 220	9.315	21.571	10.702	1.00	17.65	7	B	N
ATOM	4758	CA	THR B 220	8.939	22.636	9.762	1.00	17.51	6	B	C
ATOM	4759	C	THR B 220	7.740	23.396	10.318	1.00	18.71	6	B	C
ATOM	4760	O	THR B 220	6.826	22.725	10.828	1.00	19.69	8	B	O
ATOM	4761	CB	THR B 220	8.589	22.053	8.379	1.00	16.88	6	B	C
ATOM	4762	OG1	THR B 220	9.823	21.473	7.887	1.00	19.57	8	B	O
ATOM	4763	CG2	THR B 220	8.140	23.117	7.409	1.00	17.64	6	B	C
ATOM	4764	N	VAL B 221	7.740	24.726	10.272	1.00	15.91	7	B	N
ATOM	4765	CA	VAL B 221	6.557	25.449	10.762	1.00	17.79	6	B	C
ATOM	4766	C	VAL B 221	6.065	26.359	9.646	1.00	18.74	6	B	C
ATOM	4767	O	VAL B 221	6.914	26.896	8.903	1.00	17.70	8	B	O
ATOM	4768	CB	VAL B 221	6.840	26.281	12.009	1.00	19.82	6	B	C
ATOM	4769	CG1	VAL B 221	5.616	27.058	12.502	1.00	18.47	6	B	C
ATOM	4770	CG2	VAL B 221	7.247	25.356	13.173	1.00	18.42	6	B	C
ATOM	4771	N	VAL B 222	4.758	26.410	9.422	1.00	18.44	7	B	N
ATOM	4772	CA	VAL B 222	4.178	27.250	8.376	1.00	19.08	6	B	C
ATOM	4773	C	VAL B 222	3.190	28.215	9.026	1.00	19.78	6	B	C
ATOM	4774	O	VAL B 222	2.331	27.804	9.803	1.00	18.14	8	B	O
ATOM	4775	CB	VAL B 222	3.489	26.456	7.241	1.00	19.08	6	B	C
ATOM	4776	CG1	VAL B 222	3.103	27.278	6.022	1.00	15.42	6	B	C
ATOM	4777	CG2	VAL B 222	4.430	25.326	6.788	1.00	17.54	6	B	C
ATOM	4778	N	GLY B 223	3.356	29.524	8.705	1.00	20.51	7	B	N
ATOM	4779	CA	GLY B 223	2.441	30.512	9.264	1.00	20.01	6	B	C
ATOM	4780	C	GLY B 223	1.581	31.178	8.186	1.00	20.84	6	B	C
ATOM	4781	O	GLY B 223	1.885	31.107	6.991	1.00	19.61	8	B	O
ATOM	4782	N	GLY B 224	0.522	31.833	8.620	1.00	19.39	7	B	N
ATOM	4783	CA	GLY B 224	-0.423	32.591	7.829	1.00	20.06	6	B	C
ATOM	4784	C	GLY B 224	-1.298	31.699	6.943	1.00	21.29	6	B	C
ATOM	4785	O	GLY B 224	-1.768	32.133	5.882	1.00	18.70	8	B	O
ATOM	4786	N	VAL B 225	-1.493	30.421	7.332	1.00	21.08	7	B	N
ATOM	4787	CA	VAL B 225	-2.214	29.527	6.401	1.00	22.71	6	B	C
ATOM	4788	C	VAL B 225	-3.712	29.774	6.309	1.00	22.84	6	B	C
ATOM	4789	O	VAL B 225	-4.375	29.816	7.360	1.00	20.89	8	B	O
ATOM	4790	CB	VAL B 225	-2.024	28.088	6.968	1.00	25.05	6	B	C
ATOM	4791	CG1	VAL B 225	-2.694	27.047	6.102	1.00	26.73	6	B	C
ATOM	4792	CG2	VAL B 225	-0.526	27.780	7.044	1.00	26.51	6	B	C
ATOM	4793	N	PRO B 226	-4.285	29.737	5.108	1.00	20.55	7	B	N
ATOM	4794	CA	PRO B 226	-5.731	29.840	4.953	1.00	20.71	6	B	C
ATOM	4795	C	PRO B 226	-6.413	28.673	5.658	1.00	22.73	6	B	C
ATOM	4796	O	PRO B 226	-5.856	27.591	5.840	1.00	22.03	8	B	O
ATOM	4797	CB	PRO B 226	-5.950	29.740	3.438	1.00	20.41	6	B	C
ATOM	4798	CG	PRO B 226	-4.664	30.281	2.883	1.00	21.10	6	B	C
ATOM	4799	CD	PRO B 226	-3.567	29.781	3.810	1.00	20.05	6	B	C
ATOM	4800	N	VAL B 227	-7.630	28.932	6.127	1.00	20.77	7	B	N
ATOM	4801	CA	VAL B 227	-8.480	28.014	6.826	1.00	19.98	6	B	C
ATOM	4802	C	VAL B 227	-9.257	27.117	5.875	1.00	17.41	6	B	C
ATOM	4803	O	VAL B 227	-9.759	27.517	4.802	1.00	18.13	8	B	O
ATOM	4804	CB	VAL B 227	-9.478	28.780	7.732	1.00	20.38	6	B	C
ATOM	4805	CG1	VAL B 227	-10.458	27.810	8.398	1.00	22.02	6	B	C
ATOM	4806	CG2	VAL B 227	-8.772	29.538	8.836	1.00	21.05	6	B	C
ATOM	4807	N	GLY B 228	-9.221	25.803	6.149	1.00	17.31	7	B	N
ATOM	4808	CA	GLY B 228	-10.032	24.922	5.309	1.00	17.42	6	B	C
ATOM	4809	C	GLY B 228	-9.371	24.294	4.090	1.00	19.53	6	B	C
ATOM	4810	O	GLY B 228	-10.087	23.864	3.164	1.00	17.48	8	B	O

62/188

ATOM	4811	N	LEU	B	229	-8.040	24.310	4.044	1.00	17.34	7	B	N
ATOM	4812	CA	LEU	B	229	-7.307	23.585	3.022	1.00	18.71	6	B	C
ATOM	4813	C	LEU	B	229	-7.267	22.102	3.436	1.00	17.11	6	B	C
ATOM	4814	O	LEU	B	229	-7.088	21.842	4.634	1.00	18.57	8	B	O
ATOM	4815	CB	LEU	B	229	-5.875	24.097	2.957	1.00	17.69	6	B	C
ATOM	4816	CG	LEU	B	229	-5.807	25.510	2.296	1.00	19.37	6	B	C
ATOM	4817	CD1	LEU	B	229	-4.467	26.104	2.659	1.00	20.07	6	B	C
ATOM	4818	CD2	LEU	B	229	-5.952	25.236	0.785	1.00	19.18	6	B	C
ATOM	4819	N	GLY	B	230	-7.608	21.193	2.549	1.00	17.46	7	B	N
ATOM	4820	CA	GLY	B	230	-7.748	19.790	2.942	1.00	17.19	6	B	C
ATOM	4821	C	GLY	B	230	-9.254	19.533	3.126	1.00	17.56	6	B	C
ATOM	4822	O	GLY	B	230	-9.991	20.500	3.194	1.00	17.25	8	B	O
ATOM	4823	N	SER	B	231	-9.664	18.289	3.319	1.00	17.85	7	B	N
ATOM	4824	CA	SER	B	231	-11.026	17.942	3.630	1.00	17.04	6	B	C
ATOM	4825	C	SER	B	231	-11.114	16.630	4.405	1.00	17.82	6	B	C
ATOM	4826	O	SER	B	231	-10.297	15.744	4.116	1.00	16.40	8	B	O
ATOM	4827	CB	SER	B	231	-11.843	17.776	2.318	1.00	14.52	6	B	C
ATOM	4828	OG	SER	B	231	-13.234	17.594	2.699	1.00	19.23	8	B	O
ATOM	4829	N	TYR	B	232	-12.129	16.467	5.264	1.00	17.02	7	B	N
ATOM	4830	CA	TYR	B	232	-12.386	15.229	5.967	1.00	18.17	6	B	C
ATOM	4831	C	TYR	B	232	-13.293	14.331	5.133	1.00	17.32	6	B	C
ATOM	4832	O	TYR	B	232	-13.478	13.154	5.511	1.00	17.64	8	B	O
ATOM	4833	CB	TYR	B	232	-13.126	15.508	7.344	1.00	19.89	6	B	C
ATOM	4834	CG	TYR	B	232	-14.399	16.289	7.086	1.00	21.88	6	B	C
ATOM	4835	CD1	TYR	B	232	-15.620	15.681	6.843	1.00	21.93	6	B	C
ATOM	4836	CD2	TYR	B	232	-14.365	17.679	7.030	1.00	21.65	6	B	C
ATOM	4837	CE1	TYR	B	232	-16.757	16.438	6.590	1.00	22.50	6	B	C
ATOM	4838	CE2	TYR	B	232	-15.470	18.455	6.783	1.00	24.25	6	B	C
ATOM	4839	CZ	TYR	B	232	-16.672	17.819	6.538	1.00	26.31	6	B	C
ATOM	4840	OH	TYR	B	232	-17.766	18.611	6.251	1.00	25.37	8	B	O
ATOM	4841	N	VAL	B	233	-13.915	14.795	4.054	1.00	13.49	7	B	N
ATOM	4842	CA	VAL	B	233	-14.964	13.979	3.399	1.00	16.53	6	B	C
ATOM	4843	C	VAL	B	233	-14.473	12.686	2.711	1.00	17.17	6	B	C
ATOM	4844	O	VAL	B	233	-15.296	11.810	2.441	1.00	14.91	8	B	O
ATOM	4845	CB	VAL	B	233	-15.789	14.807	2.411	1.00	17.29	6	B	C
ATOM	4846	CG1	VAL	B	233	-16.332	16.048	3.191	1.00	17.51	6	B	C
ATOM	4847	CG2	VAL	B	233	-15.008	15.286	1.187	1.00	15.61	6	B	C
ATOM	4848	N	GLN	B	234	-13.186	12.479	2.520	1.00	16.34	7	B	N
ATOM	4849	CA	GLN	B	234	-12.650	11.210	1.986	1.00	17.63	6	B	C
ATOM	4850	C	GLN	B	234	-11.210	11.127	2.539	1.00	16.45	6	B	C
ATOM	4851	O	GLN	B	234	-10.599	12.194	2.623	1.00	16.30	8	B	O
ATOM	4852	CB	GLN	B	234	-12.657	11.130	0.474	1.00	18.02	6	B	C
ATOM	4853	CG	GLN	B	234	-12.514	9.714	-0.092	1.00	17.92	6	B	C
ATOM	4854	CD	GLN	B	234	-13.793	8.885	0.056	1.00	19.13	6	B	C
ATOM	4855	OE1	GLN	B	234	-14.899	9.318	0.457	1.00	16.83	8	B	O
ATOM	4856	NE2	GLN	B	234	-13.627	7.618	-0.286	1.00	11.21	7	B	N
ATOM	4857	N	TRP	B	235	-10.646	9.941	2.786	1.00	15.26	7	B	N
ATOM	4858	CA	TRP	B	235	-9.428	9.874	3.573	1.00	18.07	6	B	C
ATOM	4859	C	TRP	B	235	-8.249	10.490	2.815	1.00	17.69	6	B	C
ATOM	4860	O	TRP	B	235	-7.421	11.195	3.382	1.00	15.39	8	B	O
ATOM	4861	CB	TRP	B	235	-9.153	8.390	3.927	1.00	16.93	6	B	C
ATOM	4862	CG	TRP	B	235	-8.850	7.648	2.640	1.00	18.86	6	B	C
ATOM	4863	CD1	TRP	B	235	-9.789	7.143	1.763	1.00	19.55	6	B	C
ATOM	4864	CD2	TRP	B	235	-7.575	7.372	2.087	1.00	19.09	6	B	C
ATOM	4865	NE1	TRP	B	235	-9.140	6.569	0.698	1.00	20.53	7	B	N
ATOM	4866	CE2	TRP	B	235	-7.787	6.677	0.867	1.00	20.87	6	B	C
ATOM	4867	CE3	TRP	B	235	-6.274	7.631	2.489	1.00	18.65	6	B	C
ATOM	4868	CZ2	TRP	B	235	-6.755	6.202	0.065	1.00	20.11	6	B	C
ATOM	4869	CZ3	TRP	B	235	-5.226	7.200	1.678	1.00	21.37	6	B	C
ATOM	4870	CH2	TRP	B	235	-5.460	6.473	0.488	1.00	21.38	6	B	C
ATOM	4871	N	ASP	B	236	-8.327	10.376	1.489	1.00	17.52	7	B	N
ATOM	4872	CA	ASP	B	236	-7.179	10.833	0.703	1.00	17.84	6	B	C
ATOM	4873	C	ASP	B	236	-7.212	12.334	0.410	1.00	18.43	6	B	C
ATOM	4874	O	ASP	B	236	-6.322	12.770	-0.334	1.00	18.53	8	B	O
ATOM	4875	CB	ASP	B	236	-6.969	10.057	-0.593	1.00	18.06	6	B	C
ATOM	4876	CG	ASP	B	236	-8.222	10.045	-1.435	1.00	20.49	6	B	C
ATOM	4877	OD1	ASP	B	236	-9.298	10.520	-1.020	1.00	18.16	8	B	O
ATOM	4878	OD2	ASP	B	236	-8.161	9.463	-2.530	1.00	21.94	8	B	O
ATOM	4879	N	ARG	B	237	-8.168	13.040	0.961	1.00	16.83	7	B	N
ATOM	4880	CA	ARG	B	237	-8.203	14.483	0.784	1.00	17.40	6	B	C
ATOM	4881	C	ARG	B	237	-7.639	15.184	2.028	1.00	15.78	6	B	C
ATOM	4882	O	ARG	B	237	-7.697	16.406	2.117	1.00	18.34	8	B	O
ATOM	4883	CB	ARG	B	237	-9.650	14.953	0.528	1.00	18.13	6	B	C
ATOM	4884	CG	ARG	B	237	-10.154	14.294	-0.799	1.00	18.67	6	B	C
ATOM	4885	CD	ARG	B	237	-11.392	14.917	-1.368	1.00	21.33	6	B	C
ATOM	4886	NE	ARG	B	237	-11.429	16.363	-1.461	1.00	24.02	7	B	N
ATOM	4887	CZ	ARG	B	237	-12.483	17.173	-1.604	1.00	25.18	6	B	C
ATOM	4888	NH1	ARG	B	237	-13.674	16.624	-1.728	1.00	21.53	7	B	N
ATOM	4889	NH2	ARG	B	237	-12.336	18.517	-1.605	1.00	24.69	7	B	N

63/188

ATOM	4890	N	LYS	B	238	-7.247	14.406	3.018	1.00	14.75	7	B	N
ATOM	4891	CA	LYS	B	238	-6.812	15.017	4.294	1.00	17.31	6	B	C
ATOM	4892	C	LYS	B	238	-5.410	15.569	4.057	1.00	16.60	6	B	C
ATOM	4893	O	LYS	B	238	-4.571	14.820	3.609	1.00	15.05	8	B	O
ATOM	4894	CB	LYS	B	238	-6.866	14.050	5.469	1.00	16.91	6	B	C
ATOM	4895	CG	LYS	B	238	-8.340	13.719	5.816	1.00	16.05	6	B	C
ATOM	4896	CD	LYS	B	238	-8.448	12.626	6.847	1.00	16.51	6	B	C
ATOM	4897	CE	LYS	B	238	-9.972	12.436	7.253	1.00	16.38	6	B	C
ATOM	4898	NZ	LYS	B	238	-10.033	11.434	8.372	1.00	19.44	7	B	N
ATOM	4899	N	LEU	B	239	-5.238	16.839	4.360	1.00	15.84	7	B	N
ATOM	4900	CA	LEU	B	239	-3.960	17.474	4.069	1.00	17.34	6	B	C
ATOM	4901	C	LEU	B	239	-2.854	17.060	5.026	1.00	18.25	6	B	C
ATOM	4902	O	LEU	B	239	-1.703	16.957	4.599	1.00	15.69	8	B	O
ATOM	4903	CB	LEU	B	239	-4.201	19.009	4.086	1.00	14.65	6	B	C
ATOM	4904	CG	LEU	B	239	-2.918	19.834	3.942	1.00	17.79	6	B	C
ATOM	4905	CD1	LEU	B	239	-2.202	19.506	2.627	1.00	14.75	6	B	C
ATOM	4906	CD2	LEU	B	239	-3.236	21.333	3.948	1.00	16.60	6	B	C
ATOM	4907	N	ASP	B	240	-3.182	16.707	6.271	1.00	17.79	7	B	N
ATOM	4908	CA	ASP	B	240	-2.082	16.280	7.160	1.00	18.69	6	B	C
ATOM	4909	C	ASP	B	240	-1.581	14.943	6.643	1.00	16.77	6	B	C
ATOM	4910	O	ASP	B	240	-0.373	14.673	6.622	1.00	17.14	8	B	O
ATOM	4911	CB	ASP	B	240	-2.532	16.270	8.627	1.00	18.64	6	B	C
ATOM	4912	CG	ASP	B	240	-3.794	15.434	8.852	1.00	19.40	6	B	C
ATOM	4913	OD1	ASP	B	240	-4.518	15.013	7.939	1.00	19.72	8	B	O
ATOM	4914	OD2	ASP	B	240	-4.111	15.076	10.005	1.00	18.95	8	B	O
ATOM	4915	N	ALA	B	241	-2.458	14.094	6.185	1.00	15.57	7	B	N
ATOM	4916	CA	ALA	B	241	-2.033	12.816	5.628	1.00	13.73	6	B	C
ATOM	4917	C	ALA	B	241	-1.235	13.054	4.330	1.00	16.45	6	B	C
ATOM	4918	O	ALA	B	241	-0.287	12.310	4.089	1.00	13.93	8	B	O
ATOM	4919	CB	ALA	B	241	-3.266	11.977	5.342	1.00	15.20	6	B	C
ATOM	4920	N	ARG	B	242	-1.685	14.023	3.529	1.00	16.87	7	B	N
ATOM	4921	CA	ARG	B	242	-0.881	14.270	2.307	1.00	19.88	6	B	C
ATOM	4922	C	ARG	B	242	0.538	14.671	2.681	1.00	16.62	6	B	C
ATOM	4923	O	ARG	B	242	1.507	14.316	2.003	1.00	17.12	8	B	O
ATOM	4924	CB	ARG	B	242	-1.501	15.386	1.427	1.00	19.59	6	B	C
ATOM	4925	CG	ARG	B	242	-2.770	14.858	0.781	1.00	24.67	6	B	C
ATOM	4926	CD	ARG	B	242	-3.519	15.873	-0.075	1.00	25.46	6	B	C
ATOM	4927	NE	ARG	B	242	-4.653	15.218	-0.745	1.00	25.70	7	B	N
ATOM	4928	CZ	ARG	B	242	-5.389	15.879	-1.645	1.00	28.19	6	B	C
ATOM	4929	NH1	ARG	B	242	-5.100	17.145	-1.935	1.00	26.22	7	B	N
ATOM	4930	NH2	ARG	B	242	-6.320	15.274	-2.376	1.00	28.09	7	B	N
ATOM	4931	N	LEU	B	243	0.671	15.566	3.651	1.00	17.04	7	B	N
ATOM	4932	CA	LEU	B	243	2.030	15.978	4.073	1.00	17.04	6	B	C
ATOM	4933	C	LEU	B	243	2.808	14.782	4.615	1.00	17.03	6	B	C
ATOM	4934	O	LEU	B	243	4.045	14.687	4.537	1.00	16.45	8	B	O
ATOM	4935	CB	LEU	B	243	1.822	17.034	5.187	1.00	17.14	6	B	C
ATOM	4936	CG	LEU	B	243	1.502	18.426	4.646	1.00	18.75	6	B	C
ATOM	4937	CD1	LEU	B	243	1.081	19.332	5.795	1.00	17.11	6	B	C
ATOM	4938	CD2	LEU	B	243	2.730	19.075	3.975	1.00	17.54	6	B	C
ATOM	4939	N	ALA	B	244	2.096	13.906	5.327	1.00	15.93	7	B	N
ATOM	4940	CA	ALA	B	244	2.741	12.731	5.948	1.00	14.93	6	B	C
ATOM	4941	C	ALA	B	244	3.444	11.897	4.909	1.00	15.69	6	B	C
ATOM	4942	O	ALA	B	244	4.573	11.456	5.104	1.00	15.49	8	B	O
ATOM	4943	CB	ALA	B	244	1.636	11.891	6.646	1.00	16.16	6	B	C
ATOM	4944	N	GLN	B	245	2.802	11.629	3.758	1.00	15.25	7	B	N
ATOM	4945	CA	GLN	B	245	3.493	10.943	2.675	1.00	14.99	6	B	C
ATOM	4946	C	GLN	B	245	4.730	11.698	2.195	1.00	17.65	6	B	C
ATOM	4947	O	GLN	B	245	5.795	11.093	1.971	1.00	17.37	8	B	O
ATOM	4948	CB	GLN	B	245	2.552	10.743	1.456	1.00	16.44	6	B	C
ATOM	4949	CG	GLN	B	245	3.273	10.290	0.189	1.00	19.00	6	B	C
ATOM	4950	CD	GLN	B	245	2.322	10.037	-0.967	1.00	23.86	6	B	C
ATOM	4951	OE1	GLN	B	245	2.547	9.063	-1.660	1.00	27.57	8	B	O
ATOM	4952	NE2	GLN	B	245	1.413	10.950	-1.285	1.00	22.33	7	B	N
ATOM	4953	N	ALA	B	246	4.566	12.994	1.938	1.00	16.75	7	B	N
ATOM	4954	CA	ALA	B	246	5.677	13.782	1.420	1.00	17.07	6	B	C
ATOM	4955	C	ALA	B	246	6.861	13.787	2.385	1.00	17.72	6	B	C
ATOM	4956	O	ALA	B	246	8.004	13.611	1.926	1.00	17.00	8	B	O
ATOM	4957	CB	ALA	B	246	5.246	15.214	1.147	1.00	15.53	6	B	C
ATOM	4958	N	VAL	B	247	6.622	13.956	3.665	1.00	16.76	7	B	N
ATOM	4959	CA	VAL	B	247	7.743	13.926	4.635	1.00	16.10	6	B	C
ATOM	4960	C	VAL	B	247	8.410	12.576	4.729	1.00	17.26	6	B	C
ATOM	4961	O	VAL	B	247	9.664	12.522	4.650	1.00	17.53	8	B	O
ATOM	4962	CB	VAL	B	247	7.298	14.424	6.010	1.00	17.36	6	B	C
ATOM	4963	CG1	VAL	B	247	8.385	14.158	7.072	1.00	15.15	6	B	C
ATOM	4964	CG2	VAL	B	247	6.904	15.922	5.923	1.00	17.63	6	B	C
ATOM	4965	N	VAL	B	248	7.693	11.476	4.902	1.00	16.12	7	B	N
ATOM	4966	CA	VAL	B	248	8.356	10.158	4.985	1.00	15.50	6	B	C
ATOM	4967	C	VAL	B	248	9.062	9.839	3.678	1.00	17.88	6	B	C
ATOM	4968	O	VAL	B	248	9.932	8.947	3.683	1.00	16.92	8	B	O

64/188

ATOM	4969	CB	VAL	B	248	7.304	9.104	5.374	1.00	14.33	6	B	C
ATOM	4970	CG1	VAL	B	248	7.695	7.654	5.252	1.00	14.31	6	B	C
ATOM	4971	CG2	VAL	B	248	6.926	9.297	6.880	1.00	12.43	6	B	C
ATOM	4972	N	SER	B	249	8.646	10.382	2.522	1.00	15.03	7	B	N
ATOM	4973	CA	SER	B	249	9.314	10.064	1.261	1.00	18.90	6	B	C
ATOM	4974	C	SER	B	249	10.694	10.668	1.141	1.00	19.59	6	B	C
ATOM	4975	O	SER	B	249	11.416	10.400	0.145	1.00	21.65	8	B	O
ATOM	4976	CB	SER	B	249	8.473	10.529	0.040	1.00	19.02	6	B	C
ATOM	4977	OG	SER	B	249	8.589	11.966	-0.049	1.00	19.07	8	B	O
ATOM	4978	N	ILE	B	250	11.079	11.544	2.069	1.00	17.59	7	B	N
ATOM	4979	CA	ILE	B	250	12.421	12.117	1.995	1.00	17.83	6	B	C
ATOM	4980	C	ILE	B	250	13.362	10.996	2.444	1.00	19.08	6	B	C
ATOM	4981	O	ILE	B	250	13.094	10.347	3.455	1.00	15.75	8	B	O
ATOM	4982	CB	ILE	B	250	12.615	13.283	3.025	1.00	17.93	6	B	C
ATOM	4983	CG1	ILE	B	250	11.599	14.338	2.611	1.00	15.06	6	B	C
ATOM	4984	CG2	ILE	B	250	14.071	13.770	3.001	1.00	17.21	6	B	C
ATOM	4985	CD1	ILE	B	250	11.474	15.492	3.585	1.00	18.98	6	B	C
ATOM	4986	N	ASN	B	251	14.464	10.861	1.703	1.00	18.50	7	B	N
ATOM	4987	CA	ASN	B	251	15.465	9.870	2.013	1.00	19.23	6	B	C
ATOM	4988	C	ASN	B	251	15.851	9.888	3.497	1.00	16.99	6	B	C
ATOM	4989	O	ASN	B	251	16.129	10.944	4.054	1.00	15.72	8	B	O
ATOM	4990	CB	ASN	B	251	16.759	10.212	1.233	1.00	20.93	6	B	C
ATOM	4991	CG	ASN	B	251	16.587	10.146	-0.266	1.00	23.09	6	B	C
ATOM	4992	OD1	ASN	B	251	15.692	10.810	-0.807	1.00	24.08	8	B	O
ATOM	4993	ND2	ASN	B	251	17.447	9.405	-0.948	1.00	20.55	7	B	N
ATOM	4994	N	ALA	B	252	15.926	8.724	4.108	1.00	17.11	7	B	N
ATOM	4995	CA	ALA	B	252	16.344	8.522	5.481	1.00	16.77	6	B	C
ATOM	4996	C	ALA	B	252	15.230	8.880	6.468	1.00	15.44	6	B	C
ATOM	4997	O	ALA	B	252	15.352	8.506	7.660	1.00	15.50	8	B	O
ATOM	4998	CB	ALA	B	252	17.617	9.256	5.918	1.00	14.25	6	B	C
ATOM	4999	N	PHE	B	253	14.081	9.373	5.996	1.00	14.73	7	B	N
ATOM	5000	CA	PHE	B	253	13.075	9.701	7.020	1.00	14.60	6	B	C
ATOM	5001	C	PHE	B	253	12.308	8.455	7.431	1.00	15.87	6	B	C
ATOM	5002	O	PHE	B	253	11.897	7.687	6.564	1.00	14.43	8	B	O
ATOM	5003	CB	PHE	B	253	12.151	10.838	6.603	1.00	14.93	6	B	C
ATOM	5004	CG	PHE	B	253	12.724	12.195	6.765	1.00	16.61	6	B	C
ATOM	5005	CD1	PHE	B	253	13.962	12.497	6.142	1.00	16.58	6	B	C
ATOM	5006	CD2	PHE	B	253	12.102	13.158	7.512	1.00	17.47	6	B	C
ATOM	5007	CE1	PHE	B	253	14.490	13.750	6.297	1.00	16.40	6	B	C
ATOM	5008	CE2	PHE	B	253	12.640	14.420	7.676	1.00	18.75	6	B	C
ATOM	5009	CZ	PHE	B	253	13.840	14.727	7.055	1.00	17.95	6	B	C
ATOM	5010	N	LYS	B	254	12.045	8.295	8.732	1.00	17.72	7	B	N
ATOM	5011	CA	LYS	B	254	11.349	7.103	9.212	1.00	17.00	6	B	C
ATOM	5012	C	LYS	B	254	10.099	7.453	9.982	1.00	16.08	6	B	C
ATOM	5013	O	LYS	B	254	9.565	6.568	10.630	1.00	17.49	8	B	O
ATOM	5014	CB	LYS	B	254	12.335	6.269	10.079	1.00	15.38	6	B	C
ATOM	5015	CG	LYS	B	254	13.573	5.868	9.275	1.00	17.44	6	B	C
ATOM	5016	CD	LYS	B	254	13.276	4.970	8.084	1.00	18.87	6	B	C
ATOM	5017	CE	LYS	B	254	12.948	3.571	8.585	1.00	21.20	6	B	C
ATOM	5018	NZ	LYS	B	254	12.668	2.616	7.499	1.00	20.41	7	B	N
ATOM	5019	N	GLY	B	255	9.541	8.650	9.867	1.00	16.16	7	B	N
ATOM	5020	CA	GLY	B	255	8.323	8.924	10.631	1.00	15.98	6	B	C
ATOM	5021	C	GLY	B	255	8.014	10.417	10.582	1.00	15.78	6	B	C
ATOM	5022	O	GLY	B	255	8.897	11.173	10.158	1.00	14.32	8	B	O
ATOM	5023	N	VAL	B	256	6.777	10.783	10.915	1.00	15.82	7	B	N
ATOM	5024	CA	VAL	B	256	6.349	12.189	10.846	1.00	14.87	6	B	C
ATOM	5025	C	VAL	B	256	5.267	12.363	11.912	1.00	16.66	6	B	C
ATOM	5026	O	VAL	B	256	4.542	11.405	12.185	1.00	15.60	8	B	O
ATOM	5027	CB	VAL	B	256	5.798	12.433	9.427	1.00	15.27	6	B	C
ATOM	5028	CG1	VAL	B	256	4.625	11.491	9.039	1.00	14.25	6	B	C
ATOM	5029	CG2	VAL	B	256	5.340	13.893	9.273	1.00	15.17	6	B	C
ATOM	5030	N	GLU	B	257	5.104	13.532	12.528	1.00	15.43	7	B	N
ATOM	5031	CA	GLU	B	257	4.071	13.727	13.550	1.00	16.31	6	B	C
ATOM	5032	C	GLU	B	257	3.672	15.202	13.465	1.00	16.71	6	B	C
ATOM	5033	O	GLU	B	257	4.501	15.991	13.007	1.00	16.75	8	B	O
ATOM	5034	CB	GLU	B	257	4.609	13.334	14.923	1.00	18.04	6	B	C
ATOM	5035	CG	GLU	B	257	5.779	14.200	15.373	1.00	21.26	6	B	C
ATOM	5036	CD	GLU	B	257	6.390	13.818	16.722	1.00	22.33	6	B	C
ATOM	5037	OE1	GLU	B	257	5.966	12.897	17.442	1.00	21.55	8	B	O
ATOM	5038	OE2	GLU	B	257	7.385	14.477	17.073	1.00	24.37	8	B	O
ATOM	5039	N	PHE	B	258	2.484	15.544	13.920	1.00	17.32	7	B	N
ATOM	5040	CA	PHE	B	258	1.941	16.885	13.847	1.00	18.92	6	B	C
ATOM	5041	C	PHE	B	258	1.550	17.437	15.205	1.00	18.77	6	B	C
ATOM	5042	O	PHE	B	258	0.942	16.692	16.009	1.00	17.04	8	B	O
ATOM	5043	CB	PHE	B	258	0.617	16.735	13.014	1.00	18.01	6	B	C
ATOM	5044	CG	PHE	B	258	0.878	16.318	11.598	1.00	18.01	6	B	C
ATOM	5045	CD1	PHE	B	258	1.033	14.990	11.238	1.00	19.58	6	B	C
ATOM	5046	CD2	PHE	B	258	0.979	17.284	10.618	1.00	18.67	6	B	C
ATOM	5047	CE1	PHE	B	258	1.334	14.677	9.923	1.00	19.64	6	B	C

65/188

ATOM	5048	CE2	PHE	B	258	1.276	16.977	9.302	1.00	20.62	6	B	C
ATOM	5049	CZ	PHE	B	258	1.425	15.655	8.941	1.00	19.62	6	B	C
ATOM	5050	N	GLY	B	259	1.860	18.722	15.455	1.00	18.34	7	B	N
ATOM	5051	CA	GLY	B	259	1.512	19.273	16.774	1.00	18.26	6	B	C
ATOM	5052	C	GLY	B	259	2.250	18.460	17.859	1.00	19.88	6	B	C
ATOM	5053	O	GLY	B	259	3.443	18.179	17.768	1.00	20.26	8	B	O
ATOM	5054	N	LEU	B	260	1.540	18.068	18.891	1.00	19.19	7	B	N
ATOM	5055	CA	LEU	B	260	2.213	17.245	19.925	1.00	20.83	6	B	C
ATOM	5056	C	LEU	B	260	2.718	15.944	19.346	1.00	19.61	6	B	C
ATOM	5057	O	LEU	B	260	3.594	15.285	19.922	1.00	18.06	8	B	O
ATOM	5058	CB	LEU	B	260	1.243	16.864	21.054	1.00	22.72	6	B	C
ATOM	5059	CG	LEU	B	260	0.865	17.959	22.049	1.00	25.37	6	B	C
ATOM	5060	CD1	LEU	B	260	-0.190	17.392	23.019	1.00	24.76	6	B	C
ATOM	5061	CD2	LEU	B	260	2.066	18.440	22.845	1.00	25.27	6	B	C
ATOM	5062	N	GLY	B	261	2.095	15.456	18.264	1.00	19.76	7	B	N
ATOM	5063	CA	GLY	B	261	2.699	14.219	17.717	1.00	19.00	6	B	C
ATOM	5064	C	GLY	B	261	2.462	13.006	18.591	1.00	19.96	6	B	C
ATOM	5065	O	GLY	B	261	1.397	12.834	19.210	1.00	18.35	8	B	O
ATOM	5066	N	PHE	B	262	3.464	12.144	18.661	1.00	19.51	7	B	N
ATOM	5067	CA	PHE	B	262	3.393	10.929	19.455	1.00	21.02	6	B	C
ATOM	5068	C	PHE	B	262	3.115	11.247	20.922	1.00	21.16	6	B	C
ATOM	5069	O	PHE	B	262	2.450	10.437	21.553	1.00	22.45	8	B	O
ATOM	5070	CB	PHE	B	262	4.648	10.032	19.230	1.00	19.55	6	B	C
ATOM	5071	CG	PHE	B	262	4.462	9.166	17.998	1.00	20.89	6	B	C
ATOM	5072	CD1	PHE	B	262	4.693	9.712	16.748	1.00	18.97	6	B	C
ATOM	5073	CD2	PHE	B	262	4.132	7.822	18.090	1.00	19.23	6	B	C
ATOM	5074	CE1	PHE	B	262	4.517	8.932	15.572	1.00	19.18	6	B	C
ATOM	5075	CE2	PHE	B	262	3.902	7.066	16.934	1.00	19.63	6	B	C
ATOM	5076	CZ	PHE	B	262	4.115	7.627	15.674	1.00	18.25	6	B	C
ATOM	5077	N	GLU	B	263	3.418	12.402	21.471	1.00	22.88	7	B	N
ATOM	5078	CA	GLU	B	263	3.131	12.798	22.835	1.00	23.67	6	B	C
ATOM	5079	C	GLU	B	263	1.626	12.804	23.097	1.00	24.44	6	B	C
ATOM	5080	O	GLU	B	263	1.161	12.608	24.225	1.00	23.56	8	B	O
ATOM	5081	CB	GLU	B	263	3.666	14.192	23.186	1.00	26.23	6	B	C
ATOM	5082	CG	GLU	B	263	3.488	14.584	24.645	1.00	31.16	6	B	C
ATOM	5083	CD	GLU	B	263	4.163	15.902	25.025	1.00	35.07	6	B	C
ATOM	5084	OE1	GLU	B	263	5.141	16.344	24.374	1.00	34.37	8	B	O
ATOM	5085	OE2	GLU	B	263	3.700	16.520	26.021	1.00	35.81	8	B	O
ATOM	5086	N	ALA	B	264	0.878	13.148	22.043	1.00	23.63	7	B	N
ATOM	5087	CA	ALA	B	264	-0.574	13.136	22.182	1.00	22.95	6	B	C
ATOM	5088	C	ALA	B	264	-0.998	11.735	22.621	1.00	21.51	6	B	C
ATOM	5089	O	ALA	B	264	-2.083	11.660	23.209	1.00	22.73	8	B	O
ATOM	5090	CB	ALA	B	264	-1.202	13.521	20.861	1.00	22.30	6	B	C
ATOM	5091	N	GLY	B	265	-0.209	10.682	22.361	1.00	20.42	7	B	N
ATOM	5092	CA	GLY	B	265	-0.706	9.343	22.781	1.00	20.09	6	B	C
ATOM	5093	C	GLY	B	265	-0.461	9.067	24.280	1.00	24.15	6	B	C
ATOM	5094	O	GLY	B	265	-0.681	7.993	24.854	1.00	22.53	8	B	O
ATOM	5095	N	TYR	B	266	0.161	10.026	24.951	1.00	24.04	7	B	N
ATOM	5096	CA	TYR	B	266	0.516	9.910	26.364	1.00	25.72	6	B	C
ATOM	5097	C	TYR	B	266	-0.276	10.877	27.240	1.00	26.64	6	B	C
ATOM	5098	O	TYR	B	266	0.111	11.003	28.413	1.00	27.81	8	B	O
ATOM	5099	CB	TYR	B	266	2.005	10.182	26.567	1.00	23.69	6	B	C
ATOM	5100	CG	TYR	B	266	2.935	9.153	25.945	1.00	24.73	6	B	C
ATOM	5101	CD1	TYR	B	266	3.101	9.106	24.544	1.00	23.66	6	B	C
ATOM	5102	CD2	TYR	B	266	3.666	8.285	26.744	1.00	23.79	6	B	C
ATOM	5103	CE1	TYR	B	266	3.964	8.193	23.985	1.00	24.17	6	B	C
ATOM	5104	CE2	TYR	B	266	4.528	7.377	26.167	1.00	26.94	6	B	C
ATOM	5105	CZ	TYR	B	266	4.659	7.308	24.791	1.00	25.63	6	B	C
ATOM	5106	OH	TYR	B	266	5.543	6.397	24.252	1.00	27.51	8	B	O
ATOM	5107	N	ARG	B	267	-1.140	11.726	26.708	1.00	26.76	7	B	N
ATOM	5108	CA	ARG	B	267	-1.824	12.734	27.503	1.00	28.27	6	B	C
ATOM	5109	C	ARG	B	267	-3.321	12.501	27.450	1.00	29.62	6	B	C
ATOM	5110	O	ARG	B	267	-3.775	11.621	26.732	1.00	28.06	8	B	O
ATOM	5111	CB	ARG	B	267	-1.472	14.156	27.023	1.00	31.27	6	B	C
ATOM	5112	CG	ARG	B	267	0.019	14.215	26.739	1.00	33.08	6	B	C
ATOM	5113	CD	ARG	B	267	0.750	15.491	26.992	1.00	36.17	6	B	C
ATOM	5114	NE	ARG	B	267	0.150	16.706	26.543	1.00	38.01	7	B	N
ATOM	5115	CZ	ARG	B	267	0.659	17.929	26.500	1.00	40.30	6	B	C
ATOM	5116	NH1	ARG	B	267	1.903	18.204	26.841	1.00	40.60	7	B	N
ATOM	5117	NH2	ARG	B	267	-0.104	18.955	26.104	1.00	41.44	7	B	N
ATOM	5118	N	LYS	B	268	-4.053	13.256	28.258	1.00	27.96	7	B	N
ATOM	5119	CA	LYS	B	268	-5.483	13.154	28.300	1.00	27.59	6	B	C
ATOM	5120	C	LYS	B	268	-6.122	14.122	27.330	1.00	26.50	6	B	C
ATOM	5121	O	LYS	B	268	-5.470	15.115	27.012	1.00	27.06	8	B	O
ATOM	5122	CB	LYS	B	268	-6.011	13.451	29.739	1.00	28.69	6	B	C
ATOM	5123	CG	LYS	B	268	-5.475	12.316	30.618	1.00	32.47	6	B	C
ATOM	5124	CD	LYS	B	268	-5.216	12.804	32.028	1.00	36.50	6	B	C
ATOM	5125	CE	LYS	B	268	-6.492	12.677	32.846	1.00	39.23	6	B	C
ATOM	5126	NZ	LYS	B	268	-6.216	13.314	34.196	1.00	43.27	7	B	N

66/188

ATOM	5127	N	GLY	B	269	-7.362	13.825	26.948	1.00	23.90	7	B	N
ATOM	5128	CA	GLY	B	269	-8.071	14.706	26.064	1.00	25.00	6	B	C
ATOM	5129	C	GLY	B	269	-7.963	16.173	26.517	1.00	28.06	6	B	C
ATOM	5130	O	GLY	B	269	-7.905	17.077	25.682	1.00	24.99	8	B	O
ATOM	5131	N	SER	B	270	-8.097	16.361	27.842	1.00	27.65	7	B	N
ATOM	5132	CA	SER	B	270	-8.220	17.742	28.321	1.00	27.73	6	B	C
ATOM	5133	C	SER	B	270	-6.916	18.502	28.155	1.00	28.56	6	B	C
ATOM	5134	O	SER	B	270	-6.882	19.734	28.086	1.00	29.01	8	B	O
ATOM	5135	CB	SER	B	270	-8.676	17.690	29.783	1.00	27.23	6	B	C
ATOM	5136	OG	SER	B	270	-7.652	17.077	30.554	1.00	26.88	8	B	O
ATOM	5137	N	GLN	B	271	-5.826	17.760	28.038	1.00	27.86	7	B	N
ATOM	5138	CA	GLN	B	271	-4.504	18.324	27.883	1.00	29.34	6	B	C
ATOM	5139	C	GLN	B	271	-4.080	18.489	26.433	1.00	29.28	6	B	C
ATOM	5140	O	GLN	B	271	-2.981	18.973	26.151	1.00	29.06	8	B	O
ATOM	5141	CB	GLN	B	271	-3.469	17.456	28.621	1.00	33.33	6	B	C
ATOM	5142	CG	GLN	B	271	-3.800	17.167	30.089	1.00	37.17	6	B	C
ATOM	5143	CD	GLN	B	271	-2.771	16.207	30.679	1.00	38.89	6	B	C
ATOM	5144	OE1	GLN	B	271	-2.611	15.070	30.223	1.00	38.53	8	B	O
ATOM	5145	NE2	GLN	B	271	-1.966	16.699	31.630	1.00	38.62	7	B	N
ATOM	5146	N	VAL	B	272	-4.937	18.072	25.498	1.00	26.27	7	B	N
ATOM	5147	CA	VAL	B	272	-4.581	18.117	24.090	1.00	25.02	6	B	C
ATOM	5148	C	VAL	B	272	-5.456	19.031	23.238	1.00	26.05	6	B	C
ATOM	5149	O	VAL	B	272	-4.946	19.701	22.342	1.00	24.49	8	B	O
ATOM	5150	CB	VAL	B	272	-4.700	16.668	23.557	1.00	23.30	6	B	C
ATOM	5151	CG1	VAL	B	272	-4.552	16.545	22.041	1.00	21.95	6	B	C
ATOM	5152	CG2	VAL	B	272	-3.681	15.741	24.214	1.00	24.03	6	B	C
ATOM	5153	N	MET	B	273	-6.773	18.952	23.414	1.00	24.30	7	B	N
ATOM	5154	CA	MET	B	273	-7.686	19.711	22.561	1.00	25.37	6	B	C
ATOM	5155	C	MET	B	273	-7.297	21.193	22.619	1.00	25.80	6	B	C
ATOM	5156	O	MET	B	273	-6.818	21.623	23.675	1.00	28.37	8	B	O
ATOM	5157	CB	MET	B	273	-9.143	19.555	22.956	1.00	23.85	6	B	C
ATOM	5158	CG	MET	B	273	-9.820	18.243	22.697	1.00	26.06	6	B	C
ATOM	5159	SE	MET	B	273	-8.912	17.144	21.234	1.00	42.09	34	B	SE
ATOM	5160	CE2	MET	B	273	-7.921	15.748	22.383	1.00	27.23	6	B	C
ATOM	5161	N	ASP	B	274	-7.443	21.891	21.520	1.00	24.31	7	B	N
ATOM	5162	CA	ASP	B	274	-7.182	23.318	21.449	1.00	23.73	6	B	C
ATOM	5163	C	ASP	B	274	-8.502	24.081	21.470	1.00	23.09	6	B	C
ATOM	5164	O	ASP	B	274	-9.280	24.018	20.548	1.00	19.56	8	B	O
ATOM	5165	CB	ASP	B	274	-6.442	23.675	20.167	1.00	22.64	6	B	C
ATOM	5166	CG	ASP	B	274	-5.073	23.010	20.148	1.00	20.84	6	B	C
ATOM	5167	OD1	ASP	B	274	-4.358	22.963	21.155	1.00	21.59	8	B	O
ATOM	5168	OD2	ASP	B	274	-4.705	22.576	19.047	1.00	19.92	8	B	O
ATOM	5169	N	GLU	B	275	-8.757	24.792	22.558	1.00	21.96	7	B	N
ATOM	5170	CA	GLU	B	275	-9.983	25.498	22.808	1.00	23.80	6	B	C
ATOM	5171	C	GLU	B	275	-10.271	26.536	21.718	1.00	22.27	6	B	C
ATOM	5172	O	GLU	B	275	-9.310	27.084	21.201	1.00	24.63	8	B	O
ATOM	5173	CB	GLU	B	275	-9.896	26.171	24.208	1.00	23.36	6	B	C
ATOM	5174	CG	GLU	B	275	-10.152	25.134	25.290	1.00	25.43	6	B	C
ATOM	5175	CD	GLU	B	275	-10.091	25.684	26.723	1.00	29.00	6	B	C
ATOM	5176	OE1	GLU	B	275	-9.086	26.260	27.155	1.00	29.72	8	B	O
ATOM	5177	OE2	GLU	B	275	-11.045	25.517	27.470	1.00	27.77	8	B	O
ATOM	5178	N	ILE	B	276	-11.519	26.712	21.362	1.00	20.00	7	B	N
ATOM	5179	CA	ILE	B	276	-11.845	27.668	20.279	1.00	21.60	6	B	C
ATOM	5180	C	ILE	B	276	-12.149	29.040	20.870	1.00	22.34	6	B	C
ATOM	5181	O	ILE	B	276	-12.935	29.087	21.818	1.00	20.04	8	B	O
ATOM	5182	CB	ILE	B	276	-13.004	27.101	19.469	1.00	19.44	6	B	C
ATOM	5183	CG1	ILE	B	276	-12.528	25.820	18.715	1.00	21.70	6	B	C
ATOM	5184	CG2	ILE	B	276	-13.624	28.097	18.480	1.00	20.84	6	B	C
ATOM	5185	CD1	ILE	B	276	-13.688	25.037	18.107	1.00	21.33	6	B	C
ATOM	5186	N	LEU	B	277	-11.551	30.095	20.307	1.00	21.83	7	B	N
ATOM	5187	CA	LEU	B	277	-11.775	31.450	20.738	1.00	22.46	6	B	C
ATOM	5188	C	LEU	B	277	-12.234	32.336	19.584	1.00	24.25	6	B	C
ATOM	5189	O	LEU	B	277	-11.998	32.008	18.402	1.00	22.61	8	B	O
ATOM	5190	CB	LEU	B	277	-10.493	32.120	21.271	1.00	22.17	6	B	C
ATOM	5191	CG	LEU	B	277	-9.671	31.309	22.263	1.00	22.45	6	B	C
ATOM	5192	CD1	LEU	B	277	-8.423	32.136	22.621	1.00	24.91	6	B	C
ATOM	5193	CD2	LEU	B	277	-10.463	30.961	23.519	1.00	23.20	6	B	C
ATOM	5194	N	TRP	B	278	-12.894	33.440	19.927	1.00	23.92	7	B	N
ATOM	5195	CA	TRP	B	278	-13.371	34.381	18.934	1.00	23.78	6	B	C
ATOM	5196	C	TRP	B	278	-13.276	35.838	19.459	1.00	26.56	6	B	C
ATOM	5197	O	TRP	B	278	-13.583	36.019	20.624	1.00	22.89	8	B	O
ATOM	5198	CB	TRP	B	278	-14.822	34.190	18.500	1.00	23.39	6	B	C
ATOM	5199	CG	TRP	B	278	-15.249	35.104	17.383	1.00	24.51	6	B	C
ATOM	5200	CD1	TRP	B	278	-15.198	34.880	16.025	1.00	23.35	6	B	C
ATOM	5201	CD2	TRP	B	278	-15.872	36.395	17.535	1.00	24.72	6	B	C
ATOM	5202	NE1	TRP	B	278	-15.722	35.939	15.330	1.00	23.11	7	B	N
ATOM	5203	CE2	TRP	B	278	-16.134	36.882	16.246	1.00	25.99	6	B	C
ATOM	5204	CE3	TRP	B	278	-16.168	37.182	18.658	1.00	27.13	6	B	C
ATOM	5205	C22	TRP	B	278	-16.725	38.128	16.014	1.00	27.57	6	B	C

67/188

ATOM	5206	CZ3	TRP	B	278	-16.768	38.418	18.424	1.00	29.39	6	B	C
ATOM	5207	CH2	TRP	B	278	-17.050	38.872	17.119	1.00	27.91	6	B	C
ATOM	5208	N	SER	B	279	-12.844	36.739	18.582	1.00	25.76	7	B	N
ATOM	5209	CA	SER	B	279	-12.839	38.159	18.906	1.00	30.06	6	B	C
ATOM	5210	C	SER	B	279	-13.180	38.942	17.623	1.00	31.90	6	B	C
ATOM	5211	O	SER	B	279	-12.893	38.507	16.490	1.00	28.33	8	B	O
ATOM	5212	CB	SER	B	279	-11.504	38.663	19.465	1.00	30.08	6	B	C
ATOM	5213	OG	SER	B	279	-10.503	38.628	18.454	1.00	29.09	8	B	O
ATOM	5214	N	LYS	B	280	-13.806	40.107	17.810	1.00	34.17	7	B	N
ATOM	5215	CA	LYS	B	280	-14.116	40.943	16.651	1.00	37.46	6	B	C
ATOM	5216	C	LYS	B	280	-12.838	41.314	15.913	1.00	38.16	6	B	C
ATOM	5217	O	LYS	B	280	-12.876	41.542	14.704	1.00	40.04	8	B	O
ATOM	5218	CB	LYS	B	280	-14.853	42.226	17.025	1.00	40.05	6	B	C
ATOM	5219	CG	LYS	B	280	-14.196	43.038	18.126	1.00	42.49	6	B	C
ATOM	5220	CD	LYS	B	280	-15.113	44.187	18.567	1.00	45.10	6	B	C
ATOM	5221	CE	LYS	B	280	-14.313	45.284	19.276	1.00	46.39	6	B	C
ATOM	5222	NZ	LYS	B	280	-13.868	44.851	20.633	1.00	47.67	7	B	N
ATOM	5223	N	GLU	B	281	-11.728	41.327	16.634	1.00	38.32	7	B	N
ATOM	5224	CA	GLU	B	281	-10.462	41.692	16.023	1.00	40.92	6	B	C
ATOM	5225	C	GLU	B	281	-9.833	40.546	15.240	1.00	40.93	6	B	C
ATOM	5226	O	GLU	B	281	-9.315	40.821	14.170	1.00	41.96	8	B	O
ATOM	5227	CB	GLU	B	281	-9.449	42.145	17.081	1.00	41.14	6	B	C
ATOM	5228	CG	GLU	B	281	-9.903	43.358	17.875	1.00	42.83	6	B	C
ATOM	5229	CD	GLU	B	281	-10.654	43.000	19.149	1.00	44.71	6	B	C
ATOM	5230	OE1	GLU	B	281	-10.705	41.796	19.507	1.00	42.34	8	B	O
ATOM	5231	OE2	GLU	B	281	-11.157	43.974	19.765	1.00	45.56	8	B	O
ATOM	5232	N	ASP	B	282	-9.790	39.326	15.772	1.00	39.38	7	B	N
ATOM	5233	CA	ASP	B	282	-9.100	38.248	15.073	1.00	37.01	6	B	C
ATOM	5234	C	ASP	B	282	-9.968	37.177	14.427	1.00	34.40	6	B	C
ATOM	5235	O	ASP	B	282	-9.465	36.292	13.720	1.00	33.08	8	B	O
ATOM	5236	CB	ASP	B	282	-8.153	37.604	16.089	1.00	39.58	6	B	C
ATOM	5237	CG	ASP	B	282	-7.162	38.658	16.597	1.00	41.89	6	B	C
ATOM	5238	OD1	ASP	B	282	-6.885	39.621	15.850	1.00	42.77	8	B	O
ATOM	5239	OD2	ASP	B	282	-6.760	38.509	17.763	1.00	41.82	8	B	O
ATOM	5240	N	GLY	B	283	-11.259	37.262	14.675	1.00	29.73	7	B	N
ATOM	5241	CA	GLY	B	283	-12.197	36.265	14.125	1.00	25.57	6	B	C
ATOM	5242	C	GLY	B	283	-11.986	35.017	14.953	1.00	23.88	6	B	C
ATOM	5243	O	GLY	B	283	-11.613	35.154	16.143	1.00	23.07	8	B	O
ATOM	5244	N	TYR	B	284	-12.080	33.844	14.369	1.00	22.30	7	B	N
ATOM	5245	CA	TYR	B	284	-11.903	32.625	15.189	1.00	22.14	6	B	C
ATOM	5246	C	TYR	B	284	-10.435	32.289	15.384	1.00	23.59	6	B	C
ATOM	5247	O	TYR	B	284	-9.665	32.394	14.416	1.00	25.67	8	B	O
ATOM	5248	CB	TYR	B	284	-12.649	31.459	14.526	1.00	20.86	6	B	C
ATOM	5249	CG	TYR	B	284	-14.149	31.506	14.693	1.00	21.98	6	B	C
ATOM	5250	CD1	TYR	B	284	-14.956	32.025	13.682	1.00	21.62	6	B	C
ATOM	5251	CD2	TYR	B	284	-14.734	31.067	15.910	1.00	21.79	6	B	C
ATOM	5252	CE1	TYR	B	284	-16.335	32.090	13.851	1.00	21.82	6	B	C
ATOM	5253	CE2	TYR	B	284	-16.110	31.144	16.047	1.00	21.57	6	B	C
ATOM	5254	CZ	TYR	B	284	-16.885	31.633	15.034	1.00	22.82	6	B	C
ATOM	5255	OH	TYR	B	284	-18.243	31.707	15.185	1.00	23.73	8	B	O
ATOM	5256	N	THR	B	285	-9.987	31.852	16.549	1.00	22.01	7	B	N
ATOM	5257	CA	THR	B	285	-8.587	31.434	16.701	1.00	20.36	6	B	C
ATOM	5258	C	THR	B	285	-8.619	30.231	17.648	1.00	20.05	6	B	C
ATOM	5259	O	THR	B	285	-9.697	29.741	17.987	1.00	20.25	8	B	O
ATOM	5260	CB	THR	B	285	-7.683	32.542	17.258	1.00	20.31	6	B	C
ATOM	5261	OG1	ATHR	B	285	-8.245	32.946	18.529	0.50	22.02	8	B	O
ATOM	5262	OG1	BTHR	B	285	-6.322	32.081	17.210	0.50	19.04	8	B	O
ATOM	5263	CG2	ATHR	B	285	-7.584	33.753	16.370	0.50	19.55	6	B	C
ATOM	5264	CG2	BTHR	B	285	-8.000	32.823	18.722	0.50	21.11	6	B	C
ATOM	5265	N	ARG	B	286	-7.501	29.763	18.142	1.00	19.54	7	B	N
ATOM	5266	CA	ARG	B	286	-7.389	28.640	19.055	1.00	20.57	6	B	C
ATOM	5267	C	ARG	B	286	-6.516	29.100	20.228	1.00	20.63	6	B	C
ATOM	5268	O	ARG	B	286	-5.595	29.881	19.963	1.00	20.82	8	B	O
ATOM	5269	CB	ARG	B	286	-6.717	27.445	18.357	1.00	19.71	6	B	C
ATOM	5270	CG	ARG	B	286	-7.475	26.778	17.234	1.00	19.14	6	B	C
ATOM	5271	CD	ARG	B	286	-8.922	26.388	17.600	1.00	17.73	6	B	C
ATOM	5272	NE	ARG	B	286	-9.603	25.940	16.377	1.00	17.68	7	B	N
ATOM	5273	CZ	ARG	B	286	-10.159	26.647	15.443	1.00	17.27	6	B	C
ATOM	5274	NH1	ARG	B	286	-10.286	27.959	15.613	1.00	18.23	7	B	N
ATOM	5275	NH2	ARG	B	286	-10.628	26.036	14.342	1.00	15.69	7	B	N
ATOM	5276	N	ARG	B	287	-6.802	28.693	21.449	1.00	23.10	7	B	N
ATOM	5277	CA	ARG	B	287	-6.001	29.142	22.590	1.00	23.53	6	B	C
ATOM	5278	C	ARG	B	287	-4.603	28.529	22.535	1.00	23.99	6	B	C
ATOM	5279	O	ARG	B	287	-3.653	29.189	22.979	1.00	24.63	8	B	O
ATOM	5280	CB	ARG	B	287	-6.621	28.742	23.924	1.00	24.58	6	B	C
ATOM	5281	CG	AARG	B	287	-5.955	29.454	25.120	0.50	22.89	6	B	C
ATOM	5282	CG	BARG	B	287	-6.187	29.629	25.099	0.50	28.57	6	B	C
ATOM	5283	CD	AARG	B	287	-6.688	29.030	26.393	0.50	22.02	6	B	C
ATOM	5284	CD	BARG	B	287	-6.771	29.101	26.406	0.50	31.27	6	B	C

68/188

ATOM	5285	NE	AARG	B	287	-6.416	27.671	26.807	0.50	20.28	7	B	N
ATOM	5286	NE	BARG	B	287	-8.200	29.228	26.534	0.50	34.75	7	B	N
ATOM	5287	CZ	AARG	B	287	-5.284	27.340	27.450	0.50	21.54	6	B	C
ATOM	5288	CZ	BARG	B	287	-9.048	30.223	26.717	0.50	35.53	6	B	C
ATOM	5289	NH1AARG	B	287		-5.084	26.088	27.816	0.50	20.12	7	B	N
ATOM	5290	NH1BARG	B	287		-10.350	29.920	26.789	0.50	35.97	7	B	N
ATOM	5291	NH2AARG	B	287		-4.321	28.226	27.719	0.50	21.26	7	B	N
ATOM	5292	NH2BARG	B	287		-8.658	31.488	26.841	0.50	35.89	7	B	N
ATOM	5293	N	THR	B	288	-4.514	27.271	22.132	1.00	21.85	7	B	N
ATOM	5294	CA	THR	B	288	-3.229	26.577	22.054	1.00	21.86	6	B	C
ATOM	5295	C	THR	B	288	-3.059	25.922	20.685	1.00	22.02	6	B	C
ATOM	5296	O	THR	B	288	-4.040	25.921	19.936	1.00	20.94	8	B	O
ATOM	5297	CB	THR	B	288	-3.149	25.462	23.126	1.00	22.12	6	B	C
ATOM	5298	OG1	THR	B	288	-4.393	24.722	23.080	1.00	20.44	8	B	O
ATOM	5299	CG2	THR	B	288	-3.002	26.022	24.542	1.00	21.64	6	B	C
ATOM	5300	N	ASN	B	289	-1.877	25.357	20.372	1.00	21.59	7	B	N
ATOM	5301	CA	ASN	B	289	-1.740	24.700	19.074	1.00	21.28	6	B	C
ATOM	5302	C	ASN	B	289	-1.236	23.260	19.216	1.00	20.63	6	B	C
ATOM	5303	O	ASN	B	289	-0.363	22.810	18.482	1.00	20.43	8	B	O
ATOM	5304	CB	ASN	B	289	-0.869	25.542	18.130	1.00	19.43	6	B	C
ATOM	5305	CG	ASN	B	289	-0.928	25.079	16.671	1.00	20.38	6	B	C
ATOM	5306	OD1	ASN	B	289	-1.940	24.472	16.287	1.00	16.94	8	B	O
ATOM	5307	ND2	ASN	B	289	0.138	25.334	15.888	1.00	15.27	7	B	N
ATOM	5308	N	ASN	B	290	-1.687	22.490	20.197	1.00	19.95	7	B	N
ATOM	5309	CA	ASN	B	290	-1.338	21.117	20.413	1.00	19.81	6	B	C
ATOM	5310	C	ASN	B	290	-1.600	20.247	19.174	1.00	19.63	6	B	C
ATOM	5311	O	ASN	B	290	-0.893	19.300	18.945	1.00	20.88	8	B	O
ATOM	5312	CB	ASN	B	290	-2.223	20.516	21.545	1.00	20.84	6	B	C
ATOM	5313	CG	ASN	B	290	-1.917	21.154	22.900	1.00	22.18	6	B	C
ATOM	5314	OD1	ASN	B	290	-0.748	21.373	23.158	1.00	20.60	8	B	O
ATOM	5315	ND2	ASN	B	290	-2.983	21.465	23.631	1.00	21.65	7	B	N
ATOM	5316	N	LEU	B	291	-2.545	20.610	18.337	1.00	19.45	7	B	N
ATOM	5317	CA	LEU	B	291	-2.974	19.875	17.159	1.00	19.98	6	B	C
ATOM	5318	C	LEU	B	291	-2.162	20.213	15.902	1.00	20.59	6	B	C
ATOM	5319	O	LEU	B	291	-2.311	19.573	14.856	1.00	20.05	8	B	O
ATOM	5320	CB	LEU	B	291	-4.473	20.092	16.918	1.00	18.25	6	B	C
ATOM	5321	CG	LEU	B	291	-5.375	19.618	18.078	1.00	19.48	6	B	C
ATOM	5322	CD1	LEU	B	291	-6.843	19.929	17.852	1.00	19.04	6	B	C
ATOM	5323	CD2	LEU	B	291	-5.234	18.108	18.339	1.00	19.48	6	B	C
ATOM	5324	N	GLY	B	292	-1.318	21.223	16.034	1.00	18.17	7	B	N
ATOM	5325	CA	GLY	B	292	-0.341	21.495	14.964	1.00	19.31	6	B	C
ATOM	5326	C	GLY	B	292	-0.990	22.037	13.688	1.00	18.54	6	B	C
ATOM	5327	O	GLY	B	292	-0.449	21.820	12.619	1.00	18.02	8	B	O
ATOM	5328	N	GLY	B	293	-2.063	22.790	13.848	1.00	17.29	7	B	N
ATOM	5329	CA	GLY	B	293	-2.754	23.412	12.771	1.00	16.53	6	B	C
ATOM	5330	C	GLY	B	293	-3.778	22.604	12.027	1.00	17.12	6	B	C
ATOM	5331	O	GLY	B	293	-4.135	23.087	10.921	1.00	18.97	8	B	O
ATOM	5332	N	PHE	B	294	-4.079	21.357	12.419	1.00	16.37	7	B	N
ATOM	5333	CA	PHE	B	294	-5.067	20.586	11.696	1.00	16.59	6	B	C
ATOM	5334	C	PHE	B	294	-6.235	20.108	12.567	1.00	16.77	6	B	C
ATOM	5335	O	PHE	B	294	-5.991	19.657	13.691	1.00	18.40	8	B	O
ATOM	5336	CB	PHE	B	294	-4.440	19.304	11.100	1.00	16.46	6	B	C
ATOM	5337	CG	PHE	B	294	-3.478	19.650	9.977	1.00	18.93	6	B	C
ATOM	5338	CD1	PHE	B	294	-2.133	19.751	10.240	1.00	16.61	6	B	C
ATOM	5339	CD2	PHE	B	294	-3.954	19.884	8.704	1.00	17.35	6	B	C
ATOM	5340	CE1	PHE	B	294	-1.253	20.072	9.220	1.00	18.75	6	B	C
ATOM	5341	CE2	PHE	B	294	-3.073	20.235	7.693	1.00	21.30	6	B	C
ATOM	5342	CZ	PHE	B	294	-1.716	20.354	7.949	1.00	20.46	6	B	C
ATOM	5343	N	GLU	B	295	-7.421	20.099	11.979	1.00	17.31	7	B	N
ATOM	5344	CA	GLU	B	295	-8.638	19.575	12.614	1.00	17.44	6	B	C
ATOM	5345	C	GLU	B	295	-9.434	18.908	11.486	1.00	16.42	6	B	C
ATOM	5346	O	GLU	B	295	-9.648	19.530	10.441	1.00	16.06	8	B	O
ATOM	5347	CB	GLU	B	295	-9.468	20.740	13.175	1.00	16.62	6	B	C
ATOM	5348	CG	GLU	B	295	-8.844	21.289	14.472	1.00	18.19	6	B	C
ATOM	5349	CD	GLU	B	295	-9.432	22.661	14.788	1.00	19.01	6	B	C
ATOM	5350	OE1	GLU	B	295	-10.384	23.186	14.143	1.00	18.58	8	B	O
ATOM	5351	OE2	GLU	B	295	-8.904	23.208	15.761	1.00	18.89	8	B	O
ATOM	5352	N	GLY	B	296	-9.665	17.603	11.555	1.00	17.22	7	B	N
ATOM	5353	CA	GLY	B	296	-10.366	16.862	10.550	1.00	16.34	6	B	C
ATOM	5354	C	GLY	B	296	-9.555	16.801	9.244	1.00	17.33	6	B	C
ATOM	5355	O	GLY	B	296	-10.176	16.769	8.171	1.00	17.57	8	B	O
ATOM	5356	N	GLY	B	297	-8.254	16.875	9.284	1.00	18.35	7	B	N
ATOM	5357	CA	GLY	B	297	-7.490	16.806	8.007	1.00	16.51	6	B	C
ATOM	5358	C	GLY	B	297	-7.528	18.157	7.286	1.00	18.65	6	B	C
ATOM	5359	O	GLY	B	297	-7.016	18.231	6.166	1.00	17.58	8	B	O
ATOM	5360	N	MET	B	298	-7.907	19.256	7.935	1.00	16.22	7	B	N
ATOM	5361	CA	MET	B	298	-8.039	20.575	7.389	1.00	17.45	6	B	C
ATOM	5362	C	MET	B	298	-7.266	21.634	8.174	1.00	19.41	6	B	C
ATOM	5363	O	MET	B	298	-7.161	21.515	9.396	1.00	16.63	8	B	O

69/188

ATOM	5364	CB	MET	B	298	-9.515	21.090	7.413	1.00	17.32	6	B	C
ATOM	5365	CG	MET	B	298	-10.388	20.204	6.504	1.00	16.52	6	B	C
ATOM	5366	SE	MET	B	298	-12.225	20.666	6.662	1.00	35.82	34	B	SE
ATOM	5367	CE2	MET	B	298	-12.400	20.315	8.754	1.00	16.52	6	B	C
ATOM	5368	N	THR	B	299	-6.738	22.652	7.485	1.00	17.58	7	B	N
ATOM	5369	CA	THR	B	299	-5.993	23.673	8.235	1.00	18.31	6	B	C
ATOM	5370	C	THR	B	299	-6.969	24.451	9.123	1.00	19.38	6	B	C
ATOM	5371	O	THR	B	299	-8.032	24.832	8.577	1.00	17.70	8	B	O
ATOM	5372	CB	THR	B	299	-5.303	24.608	7.248	1.00	16.67	6	B	C
ATOM	5373	OG1	THR	B	299	-6.220	25.004	6.206	1.00	15.95	8	B	O
ATOM	5374	CG2	THR	B	299	-4.169	23.768	6.588	1.00	17.95	6	B	C
ATOM	5375	N	ASN	B	300	-6.586	24.758	10.372	1.00	18.79	7	B	N
ATOM	5376	CA	ASN	B	300	-7.554	25.514	11.162	1.00	20.27	6	B	C
ATOM	5377	C	ASN	B	300	-7.113	26.991	11.294	1.00	20.96	6	B	C
ATOM	5378	O	ASN	B	300	-7.819	27.722	11.987	1.00	19.50	8	B	O
ATOM	5379	CB	ASN	B	300	-7.725	24.908	12.536	1.00	16.98	6	B	C
ATOM	5380	CG	ASN	B	300	-6.462	24.916	13.346	1.00	18.44	6	B	C
ATOM	5381	OD1	ASN	B	300	-5.384	25.359	12.958	1.00	19.57	8	B	O
ATOM	5382	ND2	ASN	B	300	-6.582	24.361	14.538	1.00	15.86	7	B	N
ATOM	5383	N	GLY	B	301	-6.010	27.343	10.643	1.00	19.42	7	B	N
ATOM	5384	CA	GLY	B	301	-5.521	28.720	10.746	1.00	17.50	6	B	C
ATOM	5385	C	GLY	B	301	-4.386	28.902	11.740	1.00	19.44	6	B	C
ATOM	5386	O	GLY	B	301	-3.668	29.923	11.641	1.00	18.93	8	B	O
ATOM	5387	N	GLN	B	302	-4.090	27.952	12.622	1.00	18.03	7	B	N
ATOM	5388	CA	GLN	B	302	-2.919	28.074	13.466	1.00	18.88	6	B	C
ATOM	5389	C	GLN	B	302	-1.678	27.661	12.649	1.00	19.93	6	B	C
ATOM	5390	O	GLN	B	302	-1.800	27.128	11.560	1.00	18.92	8	B	O
ATOM	5391	CB	GLN	B	302	-2.980	27.167	14.682	1.00	20.75	6	B	C
ATOM	5392	CG	GLN	B	302	-4.155	27.438	15.615	1.00	21.04	6	B	C
ATOM	5393	CD	GLN	B	302	-3.912	28.814	16.263	1.00	24.93	6	B	C
ATOM	5394	OE1	GLN	B	302	-2.938	28.963	16.986	1.00	25.90	8	B	O
ATOM	5395	NE2	GLN	B	302	-4.719	29.811	15.955	1.00	25.85	7	B	N
ATOM	5396	N	PRO	B	303	-0.502	27.929	13.152	1.00	19.58	7	B	N
ATOM	5397	CA	PRO	B	303	0.688	27.480	12.463	1.00	21.48	6	B	C
ATOM	5398	C	PRO	B	303	0.617	25.953	12.247	1.00	21.20	6	B	C
ATOM	5399	O	PRO	B	303	0.184	25.157	13.068	1.00	17.36	8	B	O
ATOM	5400	CB	PRO	B	303	1.789	27.834	13.439	1.00	21.44	6	B	C
ATOM	5401	CG	PRO	B	303	1.270	29.083	14.140	1.00	20.83	6	B	C
ATOM	5402	CD	PRO	B	303	-0.197	28.660	14.396	1.00	22.34	6	B	C
ATOM	5403	N	ILE	B	304	1.017	25.533	11.047	1.00	21.77	7	B	N
ATOM	5404	CA	ILE	B	304	1.207	24.121	10.748	1.00	20.16	6	B	C
ATOM	5405	C	ILE	B	304	2.565	23.777	11.419	1.00	20.66	6	B	C
ATOM	5406	O	ILE	B	304	3.589	24.401	11.090	1.00	21.54	8	B	O
ATOM	5407	CB	ILE	B	304	1.313	23.778	9.257	1.00	19.66	6	B	C
ATOM	5408	CG1	ILE	B	304	-0.031	23.928	8.540	1.00	21.00	6	B	C
ATOM	5409	CG2	ILE	B	304	1.843	22.345	9.101	1.00	19.24	6	B	C
ATOM	5410	CD1	ILE	B	304	0.005	23.778	7.032	1.00	21.67	6	B	C
ATOM	5411	N	VAL	B	305	2.530	22.781	12.289	1.00	18.79	7	B	N
ATOM	5412	CA	VAL	B	305	3.723	22.312	12.965	1.00	18.38	6	B	C
ATOM	5413	C	VAL	B	305	3.888	20.815	12.703	1.00	19.83	6	B	C
ATOM	5414	O	VAL	B	305	3.087	20.015	13.148	1.00	18.53	8	B	O
ATOM	5415	CB	VAL	B	305	3.678	22.572	14.477	1.00	17.37	6	B	C
ATOM	5416	CG1	VAL	B	305	4.980	22.115	15.161	1.00	17.00	6	B	C
ATOM	5417	CG2	VAL	B	305	3.448	24.061	14.723	1.00	16.04	6	B	C
ATOM	5418	N	VAL	B	306	4.949	20.482	11.983	1.00	18.34	7	B	N
ATOM	5419	CA	VAL	B	306	5.249	19.105	11.616	1.00	18.01	6	B	C
ATOM	5420	C	VAL	B	306	6.728	18.787	11.779	1.00	18.23	6	B	C
ATOM	5421	O	VAL	B	306	7.609	19.636	11.574	1.00	18.63	8	B	O
ATOM	5422	CB	VAL	B	306	4.740	18.923	10.161	1.00	18.60	6	B	C
ATOM	5423	CG1	VAL	B	306	5.566	19.761	9.200	1.00	23.00	6	B	C
ATOM	5424	CG2	VAL	B	306	4.742	17.454	9.801	1.00	18.75	6	B	C
ATOM	5425	N	ARG	B	307	7.017	17.611	12.314	1.00	18.40	7	B	N
ATOM	5426	CA	ARG	B	307	8.319	17.080	12.643	1.00	20.54	6	B	C
ATOM	5427	C	ARG	B	307	8.543	15.752	11.894	1.00	20.15	6	B	C
ATOM	5428	O	ARG	B	307	7.599	14.977	11.739	1.00	19.61	8	B	O
ATOM	5429	CB	ARG	B	307	8.463	16.819	14.153	1.00	20.11	6	B	C
ATOM	5430	CG	ARG	B	307	8.543	18.130	14.948	1.00	21.77	6	B	C
ATOM	5431	CD	ARG	B	307	9.023	17.893	16.399	1.00	22.45	6	B	C
ATOM	5432	NE	ARG	B	307	7.997	17.077	17.072	1.00	25.23	7	B	N
ATOM	5433	CZ	ARG	B	307	6.878	17.619	17.566	1.00	26.01	6	B	C
ATOM	5434	NH1	ARG	B	307	6.691	18.940	17.476	1.00	24.66	7	B	N
ATOM	5435	NH2	ARG	B	307	5.953	16.845	18.144	1.00	26.10	7	B	N
ATOM	5436	N	GLY	B	308	9.760	15.581	11.419	1.00	18.47	7	B	N
ATOM	5437	CA	GLY	B	308	10.105	14.322	10.715	1.00	17.93	6	B	C
ATOM	5438	C	GLY	B	308	11.400	13.817	11.350	1.00	19.23	6	B	C
ATOM	5439	O	GLY	B	308	12.215	14.607	11.809	1.00	21.59	8	B	O
ATOM	5440	N	VAL	B	309	11.521	12.490	11.528	1.00	18.44	7	B	N
ATOM	5441	CA	VAL	B	309	12.752	11.936	12.020	1.00	17.91	6	B	C
ATOM	5442	C	VAL	B	309	13.603	11.399	10.869	1.00	20.66	6	B	C

70/188

ATOM	5443	O	VAL	B	309	13.166	10.574	10.043	1.00	18.13	8	B	O
ATOM	5444	CB	VAL	B	309	12.576	10.835	13.069	1.00	16.75	6	B	C
ATOM	5445	CG1	VAL	B	309	11.566	9.771	12.596	1.00	15.15	6	B	C
ATOM	5446	CG2	VAL	B	309	13.910	10.159	13.376	1.00	17.10	6	B	C
ATOM	5447	N	MET	B	310	14.859	11.879	10.835	1.00	18.75	7	B	N
ATOM	5448	CA	MET	B	310	15.799	11.372	9.834	1.00	18.36	6	B	C
ATOM	5449	C	MET	B	310	16.691	10.338	10.526	1.00	19.34	6	B	C
ATOM	5450	O	MET	B	310	17.338	10.620	11.551	1.00	19.07	8	B	O
ATOM	5451	CB	MET	B	310	16.695	12.481	9.276	1.00	15.99	6	B	C
ATOM	5452	CG	MET	B	310	17.658	11.877	8.245	1.00	18.10	6	B	C
ATOM	5453	SE	MET	B	310	18.953	13.245	8.009	1.00	39.46	34	B	SE
ATOM	5454	CE2	MET	B	310	19.945	12.502	6.322	1.00	30.02	6	B	C
ATOM	5455	N	LYS	B	311	16.706	9.100	10.043	1.00	19.22	7	B	N
ATOM	5456	CA	LYS	B	311	17.600	8.092	10.625	1.00	18.73	6	B	C
ATOM	5457	C	LYS	B	311	19.028	8.481	10.219	1.00	18.35	6	B	C
ATOM	5458	O	LYS	B	311	19.235	9.259	9.305	1.00	20.26	8	B	O
ATOM	5459	CB	LYS	B	311	17.279	6.679	10.069	1.00	16.26	6	B	C
ATOM	5460	CG	LYS	B	311	17.890	6.371	8.700	1.00	20.35	6	B	C
ATOM	5461	CD	LYS	B	311	17.265	5.148	7.940	1.00	20.13	6	B	C
ATOM	5462	CE	LYS	B	311	18.355	4.600	6.971	1.00	20.91	6	B	C
ATOM	5463	NZ	LYS	B	311	17.742	3.742	5.887	1.00	17.72	7	B	N
ATOM	5464	N	PRO	B	312	20.047	7.926	10.842	1.00	19.64	7	B	N
ATOM	5465	CA	PRO	B	312	21.436	8.174	10.512	1.00	19.40	6	B	C
ATOM	5466	C	PRO	B	312	21.769	7.755	9.103	1.00	18.83	6	B	C
ATOM	5467	O	PRO	B	312	21.198	6.839	8.519	1.00	17.99	8	B	O
ATOM	5468	CB	PRO	B	312	22.237	7.228	11.471	1.00	19.50	6	B	C
ATOM	5469	CG	PRO	B	312	21.310	7.225	12.651	1.00	20.78	6	B	C
ATOM	5470	CD	PRO	B	312	19.937	7.024	12.009	1.00	19.85	6	B	C
ATOM	5471	N	ILE	B	313	22.741	8.418	8.509	1.00	19.90	7	B	N
ATOM	5472	CA	ILE	B	313	23.227	8.027	7.168	1.00	21.10	6	B	C
ATOM	5473	C	ILE	B	313	23.647	6.573	7.202	1.00	21.83	6	B	C
ATOM	5474	O	ILE	B	313	24.386	6.148	8.072	1.00	19.54	8	B	O
ATOM	5475	CB	ILE	B	313	24.388	9.004	6.884	1.00	23.84	6	B	C
ATOM	5476	CG1	ILE	B	313	23.702	10.346	6.621	1.00	24.63	6	B	C
ATOM	5477	CG2	ILE	B	313	25.258	8.481	5.762	1.00	23.10	6	B	C
ATOM	5478	CD1	ILE	B	313	24.464	11.434	5.924	1.00	27.12	6	B	C
ATOM	5479	N	PRO	B	314	23.245	5.760	6.233	1.00	20.24	7	B	N
ATOM	5480	CA	PRO	B	314	23.573	4.355	6.199	1.00	21.78	6	B	C
ATOM	5481	C	PRO	B	314	25.045	4.094	5.924	1.00	22.55	6	B	C
ATOM	5482	O	PRO	B	314	25.567	3.078	6.378	1.00	23.39	8	B	O
ATOM	5483	CB	PRO	B	314	22.808	3.834	4.966	1.00	21.14	6	B	C
ATOM	5484	CG	PRO	B	314	21.643	4.787	4.907	1.00	21.55	6	B	C
ATOM	5485	CD	PRO	B	314	22.308	6.139	5.157	1.00	20.30	6	B	C
ATOM	5486	N	THR	B	315	25.684	4.929	5.115	1.00	24.33	7	B	N
ATOM	5487	CA	THR	B	315	27.073	4.617	4.747	1.00	23.84	6	B	C
ATOM	5488	C	THR	B	315	28.017	5.024	5.881	1.00	25.60	6	B	C
ATOM	5489	O	THR	B	315	28.304	6.211	6.015	1.00	25.99	8	B	O
ATOM	5490	CB	THR	B	315	27.500	5.361	3.479	1.00	29.64	6	B	C
ATOM	5491	OG1	THR	B	315	26.552	5.101	2.430	1.00	26.20	8	B	O
ATOM	5492	CG2	THR	B	315	28.900	4.912	3.059	1.00	24.46	6	B	C
ATOM	5493	N	LEU	B	316	28.576	4.037	6.545	1.00	27.24	7	B	N
ATOM	5494	CA	LEU	B	316	29.493	4.211	7.665	1.00	29.56	6	B	C
ATOM	5495	C	LEU	B	316	30.910	3.982	7.108	1.00	29.63	6	B	C
ATOM	5496	O	LEU	B	316	31.053	3.100	6.239	1.00	28.79	8	B	O
ATOM	5497	CB	LEU	B	316	29.214	3.196	8.782	1.00	31.48	6	B	C
ATOM	5498	CG	LEU	B	316	27.966	3.360	9.652	1.00	36.17	6	B	C
ATOM	5499	CD1	LEU	B	316	26.735	2.730	9.032	1.00	35.93	6	B	C
ATOM	5500	CD2	LEU	B	316	28.142	2.686	11.023	1.00	36.26	6	B	C
ATOM	5501	N	TYR	B	317	31.862	4.761	7.577	1.00	29.02	7	B	N
ATOM	5502	CA	TYR	B	317	33.234	4.602	7.110	1.00	32.40	6	B	C
ATOM	5503	C	TYR	B	317	33.865	3.393	7.777	1.00	32.51	6	B	C
ATOM	5504	O	TYR	B	317	34.899	2.928	7.298	1.00	30.91	8	B	O
ATOM	5505	CB	TYR	B	317	34.007	5.909	7.194	1.00	33.83	6	B	C
ATOM	5506	CG	TYR	B	317	33.861	6.831	6.000	1.00	36.50	6	B	C
ATOM	5507	CD1	TYR	B	317	32.673	6.884	5.280	1.00	38.92	6	B	C
ATOM	5508	CD2	TYR	B	317	34.873	7.687	5.593	1.00	38.31	6	B	C
ATOM	5509	CE1	TYR	B	317	32.504	7.768	4.232	1.00	39.47	6	B	C
ATOM	5510	CE2	TYR	B	317	34.717	8.581	4.542	1.00	39.23	6	B	C
ATOM	5511	CZ	TYR	B	317	33.526	8.608	3.855	1.00	38.57	6	B	C
ATOM	5512	OH	TYR	B	317	33.315	9.454	2.794	1.00	38.26	8	B	O
ATOM	5513	N	LYS	B	318	33.286	2.888	8.847	1.00	33.86	7	B	N
ATOM	5514	CA	LYS	B	318	33.676	1.634	9.492	1.00	35.26	6	B	C
ATOM	5515	C	LYS	B	318	32.456	0.765	9.103	1.00	33.07	6	B	C
ATOM	5516	O	LYS	B	318	31.480	0.756	9.831	1.00	29.56	8	B	O
ATOM	5517	CB	LYS	B	318	33.811	1.574	11.003	1.00	38.21	6	B	C
ATOM	5518	CG	LYS	B	318	34.958	2.317	11.633	1.00	43.31	6	B	C
ATOM	5519	CD	LYS	B	318	35.415	1.651	12.941	1.00	47.78	6	B	C
ATOM	5520	CE	LYS	B	318	36.811	2.138	13.338	1.00	49.44	6	B	C
ATOM	5521	NZ	LYS	B	318	37.492	1.250	14.335	1.00	52.59	7	B	N

71/188

ATOM	5522	N	PRO B 319	32.479	0.162	7.925	1.00	32.28	7	B	N
ATOM	5523	CA	PRO B 319	31.334	-0.561	7.409	1.00	31.06	6	B	C
ATOM	5524	C	PRO B 319	30.780	-1.709	8.225	1.00	31.00	6	B	C
ATOM	5525	O	PRO B 319	31.487	-2.422	8.929	1.00	28.84	8	B	O
ATOM	5526	CB	PRO B 319	31.781	-1.013	6.023	1.00	32.02	6	B	C
ATOM	5527	CG	PRO B 319	33.288	-0.981	6.110	1.00	32.98	6	B	C
ATOM	5528	CD	PRO B 319	33.642	0.153	7.021	1.00	31.84	6	B	C
ATOM	5529	N	LEU B 320	29.465	-1.932	8.109	1.00	29.22	7	B	N
ATOM	5530	CA	LEU B 320	28.831	-3.039	8.819	1.00	30.27	6	B	C
ATOM	5531	C	LEU B 320	28.938	-4.289	7.976	1.00	29.11	6	B	C
ATOM	5532	O	LEU B 320	29.384	-4.203	6.823	1.00	28.33	8	B	O
ATOM	5533	CB	LEU B 320	27.370	-2.705	9.124	1.00	31.82	6	B	C
ATOM	5534	CG	LEU B 320	27.175	-1.411	9.919	1.00	32.71	6	B	C
ATOM	5535	CD1	LEU B 320	25.731	-0.921	9.802	1.00	33.30	6	B	C
ATOM	5536	CD2	LEU B 320	27.535	-1.665	11.380	1.00	31.90	6	B	C
ATOM	5537	N	MET B 321	28.369	-5.379	8.485	1.00	28.08	7	B	N
ATOM	5538	CA	MET B 321	28.431	-6.639	7.750	1.00	26.91	6	B	C
ATOM	5539	C	MET B 321	27.395	-6.756	6.651	1.00	26.78	6	B	C
ATOM	5540	O	MET B 321	26.217	-6.395	6.777	1.00	26.93	8	B	O
ATOM	5541	CB	MET B 321	28.332	-7.720	8.818	1.00	26.43	6	B	C
ATOM	5542	CG	MET B 321	28.165	-9.122	8.324	1.00	29.66	6	B	C
ATOM	5543	SE	MET B 321	30.454	-9.330	7.624	1.00	79.64	34	B	SE
ATOM	5544	CE2	MET B 321	31.359	-7.930	8.453	1.00	25.11	6	B	C
ATOM	5545	N	SER B 322	27.811	-7.405	5.570	1.00	27.18	7	B	N
ATOM	5546	CA	SER B 322	26.952	-7.617	4.400	1.00	26.69	6	B	C
ATOM	5547	C	SER B 322	27.352	-8.921	3.702	1.00	27.70	6	B	C
ATOM	5548	O	SER B 322	27.922	-9.841	4.328	1.00	27.97	8	B	O
ATOM	5549	CB	SER B 322	26.978	-6.379	3.498	1.00	25.87	6	B	C
ATOM	5550	OG	SER B 322	26.096	-6.469	2.374	1.00	27.27	8	B	O
ATOM	5551	N	VAL B 323	27.016	-9.016	2.426	1.00	26.07	7	B	N
ATOM	5552	CA	VAL B 323	27.236	-10.232	1.626	1.00	26.01	6	B	C
ATOM	5553	C	VAL B 323	27.714	-9.820	0.234	1.00	28.12	6	B	C
ATOM	5554	O	VAL B 323	27.199	-8.851	-0.349	1.00	29.45	8	B	O
ATOM	5555	CB	VAL B 323	25.934	-11.034	1.502	1.00	23.18	6	B	C
ATOM	5556	CG1	VAL B 323	26.084	-12.251	0.599	1.00	23.23	6	B	C
ATOM	5557	CG2	VAL B 323	25.385	-11.494	2.846	1.00	20.76	6	B	C
ATOM	5558	N	ASP B 324	28.634	-10.550	-0.344	1.00	28.20	7	B	N
ATOM	5559	CA	ASP B 324	29.087	-10.384	-1.715	1.00	29.13	6	B	C
ATOM	5560	C	ASP B 324	28.055	-10.985	-2.667	1.00	29.14	6	B	C
ATOM	5561	O	ASP B 324	27.844	-12.222	-2.622	1.00	29.20	8	B	O
ATOM	5562	CB	ASP B 324	30.429	-11.131	-1.853	1.00	30.25	6	B	C
ATOM	5563	CG	ASP B 324	31.049	-10.980	-3.214	1.00	31.84	6	B	C
ATOM	5564	OD1	ASP B 324	30.400	-11.259	-4.240	1.00	31.76	8	B	O
ATOM	5565	OD2	ASP B 324	32.218	-10.531	-3.223	1.00	33.07	8	B	O
ATOM	5566	N	ILE B 325	27.329	-10.164	-3.424	1.00	25.58	7	B	N
ATOM	5567	CA	ILE B 325	26.228	-10.712	-4.237	1.00	25.30	6	B	C
ATOM	5568	C	ILE B 325	26.707	-11.639	-5.347	1.00	27.45	6	B	C
ATOM	5569	O	ILE B 325	25.901	-12.380	-5.936	1.00	24.90	8	B	O
ATOM	5570	CB	ILE B 325	25.324	-9.589	-4.796	1.00	24.84	6	B	C
ATOM	5571	CG1	ILE B 325	26.082	-8.686	-5.752	1.00	21.38	6	B	C
ATOM	5572	CG2	ILE B 325	24.814	-8.751	-3.611	1.00	22.54	6	B	C
ATOM	5573	CD1	ILE B 325	25.195	-7.790	-6.638	1.00	22.54	6	B	C
ATOM	5574	N	GLU B 326	28.025	-11.697	-5.549	1.00	27.07	7	B	N
ATOM	5575	CA	GLU B 326	28.594	-12.580	-6.549	1.00	30.39	6	B	C
ATOM	5576	C	GLU B 326	28.955	-13.951	-5.989	1.00	30.54	6	B	C
ATOM	5577	O	GLU B 326	28.829	-14.952	-6.704	1.00	31.35	8	B	O
ATOM	5578	CB	GLU B 326	29.853	-11.975	-7.174	1.00	32.68	6	B	C
ATOM	5579	CG	GLU B 326	29.587	-11.042	-8.345	1.00	36.31	6	B	C
ATOM	5580	CD	GLU B 326	30.849	-10.530	-9.015	1.00	37.66	6	B	C
ATOM	5581	OE1	GLU B 326	31.863	-10.271	-8.346	1.00	38.29	8	B	O
ATOM	5582	OE2	GLU B 326	30.852	-10.372	-10.249	1.00	39.54	8	B	O
ATOM	5583	N	THR B 327	29.375	-14.020	-4.735	1.00	30.30	7	B	N
ATOM	5584	CA	THR B 327	29.835	-15.299	-4.203	1.00	31.11	6	B	C
ATOM	5585	C	THR B 327	28.970	-15.761	-3.042	1.00	30.65	6	B	C
ATOM	5586	O	THR B 327	29.182	-16.879	-2.581	1.00	30.54	8	B	O
ATOM	5587	CB	THR B 327	31.247	-15.142	-3.583	1.00	30.25	6	B	C
ATOM	5588	OG1	THR B 327	31.090	-14.268	-2.441	1.00	28.80	8	B	O
ATOM	5589	CG2	THR B 327	32.249	-14.561	-4.566	1.00	29.61	6	B	C
ATOM	5590	N	HIS B 328	28.104	-14.903	-2.536	1.00	29.80	7	B	N
ATOM	5591	CA	HIS B 328	27.273	-15.210	-1.379	1.00	31.74	6	B	C
ATOM	5592	C	HIS B 328	28.113	-15.356	-0.104	1.00	30.81	6	B	C
ATOM	5593	O	HIS B 328	27.571	-15.737	0.948	1.00	28.55	8	B	O
ATOM	5594	CB	HIS B 328	26.315	-16.379	-1.519	1.00	31.88	6	B	C
ATOM	5595	CG	HIS B 328	25.181	-16.167	-2.483	1.00	35.34	6	B	C
ATOM	5596	ND1	HIS B 328	24.849	-17.108	-3.425	1.00	35.86	7	B	N
ATOM	5597	CD2	HIS B 328	24.291	-15.140	-2.634	1.00	34.86	6	B	C
ATOM	5598	CE1	HIS B 328	23.831	-16.648	-4.169	1.00	36.53	6	B	C
ATOM	5599	NE2	HIS B 328	23.481	-15.466	-3.695	1.00	35.16	7	B	N
ATOM	5600	N	GLU B 329	29.356	-14.892	-0.104	1.00	33.85	7	B	N

72/188

ATOM	5601	CA	GLU	B	329	30.127	-14.894	1.150	1.00	36.24	6	B	C
ATOM	5602	C	GLU	B	329	29.928	-13.623	1.950	1.00	35.34	6	B	C
ATOM	5603	O	GLU	B	329	29.721	-12.560	1.363	1.00	34.25	8	B	O
ATOM	5604	CB	GLU	B	329	31.617	-14.992	0.812	1.00	40.22	6	B	C
ATOM	5605	CG	AGLU	B	329	32.053	-16.334	0.249	0.50	41.12	6	B	C
ATOM	5606	CG	BGLU	B	329	31.965	-16.443	0.473	0.50	43.98	6	B	C
ATOM	5607	CD	AGLU	B	329	32.253	-17.340	1.375	0.50	41.51	6	B	C
ATOM	5608	CD	BGLU	B	329	32.972	-16.525	-0.652	0.50	46.07	6	B	C
ATOM	5609	OE1AGLU	B	329	32.884	-16.959	2.385	0.50	42.70	8	B	O	
ATOM	5610	OE1BGLU	B	329	33.034	-17.588	-1.313	0.50	46.76	8	B	O	
ATOM	5611	OE2AGLU	B	329	31.758	-18.472	1.247	0.50	41.46	8	B	O	
ATOM	5612	OE2BGLU	B	329	33.685	-15.519	-0.873	0.50	47.46	8	B	O	
ATOM	5613	N	PRO	B	330	30.148	-13.694	3.256	1.00	35.77	7	B	N
ATOM	5614	CA	PRO	B	330	30.022	-12.540	4.119	1.00	35.94	6	B	C
ATOM	5615	C	PRO	B	330	31.167	-11.588	3.763	1.00	36.27	6	B	C
ATOM	5616	O	PRO	B	330	32.272	-12.060	3.462	1.00	33.97	8	B	O
ATOM	5617	CB	PRO	B	330	30.100	-13.058	5.531	1.00	36.34	6	B	C
ATOM	5618	CG	PRO	B	330	30.098	-14.540	5.448	1.00	37.07	6	B	C
ATOM	5619	CD	PRO	B	330	30.424	-14.931	4.033	1.00	36.57	6	B	C
ATOM	5620	N	TYR	B	331	30.871	-10.308	3.833	1.00	35.42	7	B	N
ATOM	5621	CA	TYR	B	331	31.854	-9.287	3.481	1.00	37.71	6	B	C
ATOM	5622	C	TYR	B	331	31.375	-7.950	4.048	1.00	37.33	6	B	C
ATOM	5623	O	TYR	B	331	30.175	-7.750	4.245	1.00	36.03	8	B	O
ATOM	5624	CB	TYR	B	331	31.890	-9.210	1.965	1.00	41.77	6	B	C
ATOM	5625	CG	TYR	B	331	33.153	-9.000	1.187	1.00	44.71	6	B	C
ATOM	5626	CD1	TYR	B	331	33.804	-10.078	0.587	1.00	46.76	6	B	C
ATOM	5627	CD2	TYR	B	331	33.694	-7.736	1.022	1.00	46.01	6	B	C
ATOM	5628	CE1	TYR	B	331	34.971	-9.888	-0.145	1.00	48.02	6	B	C
ATOM	5629	CE2	TYR	B	331	34.849	-7.535	0.295	1.00	48.10	6	B	C
ATOM	5630	CZ	TYR	B	331	35.484	-8.619	-0.284	1.00	48.71	6	B	C
ATOM	5631	OH	TYR	B	331	36.634	-8.391	-1.005	1.00	50.60	8	B	O
ATOM	5632	N	LYS	B	332	32.305	-7.035	4.258	1.00	35.54	7	B	N
ATOM	5633	CA	LYS	B	332	31.931	-5.741	4.797	1.00	35.70	6	B	C
ATOM	5634	C	LYS	B	332	31.264	-4.933	3.687	1.00	34.39	6	B	C
ATOM	5635	O	LYS	B	332	31.621	-5.127	2.521	1.00	32.68	8	B	O
ATOM	5636	CB	LYS	B	332	33.175	-5.074	5.381	1.00	36.92	6	B	C
ATOM	5637	CG	LYS	B	332	33.439	-5.624	6.787	1.00	41.12	6	B	C
ATOM	5638	CD	LYS	B	332	34.627	-4.959	7.470	1.00	42.64	6	B	C
ATOM	5639	CE	LYS	B	332	34.597	-5.217	8.974	1.00	45.32	6	B	C
ATOM	5640	NZ	LYS	B	332	33.942	-6.526	9.297	1.00	45.74	7	B	N
ATOM	5641	N	ALA	B	333	30.236	-4.163	4.054	1.00	31.29	7	B	N
ATOM	5642	CA	ALA	B	333	29.591	-3.315	3.066	1.00	30.55	6	B	C
ATOM	5643	C	ALA	B	333	30.634	-2.422	2.382	1.00	29.89	6	B	C
ATOM	5644	O	ALA	B	333	31.678	-2.077	2.932	1.00	28.44	8	B	O
ATOM	5645	CB	ALA	B	333	28.494	-2.460	3.673	1.00	28.73	6	B	C
ATOM	5646	N	THR	B	334	30.282	-2.012	1.163	1.00	29.07	7	B	N
ATOM	5647	CA	THR	B	334	31.126	-1.089	0.422	1.00	28.27	6	B	C
ATOM	5648	C	THR	B	334	31.148	0.242	1.169	1.00	27.63	6	B	C
ATOM	5649	O	THR	B	334	30.149	0.516	1.840	1.00	25.67	8	B	O
ATOM	5650	CB	THR	B	334	30.612	-0.809	-0.999	1.00	27.48	6	B	C
ATOM	5651	OG1	THR	B	334	31.561	0.098	-1.610	1.00	26.64	8	B	O
ATOM	5652	CG2	THR	B	334	29.220	-0.143	-0.963	1.00	25.54	6	B	C
ATOM	5653	N	VAL	B	335	32.240	1.016	1.048	1.00	27.62	7	B	N
ATOM	5654	CA	VAL	B	335	32.254	2.310	1.716	1.00	26.67	6	B	C
ATOM	5655	C	VAL	B	335	32.185	3.361	0.592	1.00	27.78	6	B	C
ATOM	5656	O	VAL	B	335	33.179	3.483	-0.144	1.00	27.27	8	B	O
ATOM	5657	CB	VAL	B	335	33.489	2.578	2.611	1.00	27.93	6	B	C
ATOM	5658	CG1	VAL	B	335	33.503	4.014	3.140	1.00	24.49	6	B	C
ATOM	5659	CG2	VAL	B	335	33.589	1.681	3.842	1.00	25.13	6	B	C
ATOM	5660	N	GLU	B	336	31.095	4.081	0.393	1.00	26.40	7	B	N
ATOM	5661	CA	GLU	B	336	31.090	5.122	-0.659	1.00	27.18	6	B	C
ATOM	5662	C	GLU	B	336	31.350	6.476	-0.033	1.00	26.60	6	B	C
ATOM	5663	O	GLU	B	336	31.181	6.563	1.191	1.00	27.65	8	B	O
ATOM	5664	CB	GLU	B	336	29.780	5.161	-1.461	1.00	27.16	6	B	C
ATOM	5665	CG	GLU	B	336	29.358	3.817	-2.051	1.00	27.79	6	B	C
ATOM	5666	CD	GLU	B	336	30.232	3.388	-3.212	1.00	27.63	6	B	C
ATOM	5667	OE1	GLU	B	336	30.442	4.248	-4.101	1.00	29.29	8	B	O
ATOM	5668	OE2	GLU	B	336	30.639	2.206	-3.228	1.00	26.52	8	B	O
ATOM	5669	N	ARG	B	337	31.506	7.536	-0.810	1.00	26.25	7	B	N
ATOM	5670	CA	ARG	B	337	31.698	8.883	-0.260	1.00	27.46	6	B	C
ATOM	5671	C	ARG	B	337	30.424	9.349	0.435	1.00	29.53	6	B	C
ATOM	5672	O	ARG	B	337	29.334	9.313	-0.160	1.00	30.08	8	B	O
ATOM	5673	CB	ARG	B	337	32.159	9.894	-1.323	1.00	27.69	6	B	C
ATOM	5674	CG	ARG	B	337	32.663	11.206	-0.734	1.00	30.07	6	B	C
ATOM	5675	CD	ARG	B	337	33.045	12.258	-1.748	1.00	31.52	6	B	C
ATOM	5676	NE	ARG	B	337	32.261	12.227	-2.982	1.00	31.55	7	B	N
ATOM	5677	CZ	ARG	B	337	32.646	12.656	-4.167	1.00	32.78	6	B	C
ATOM	5678	NH1	ARG	B	337	33.874	13.170	-4.315	1.00	33.28	7	B	N
ATOM	5679	NH2	ARG	B	337	31.860	12.574	-5.250	1.00	32.77	7	B	N

73/188

ATOM	5680	N	SER B 338	30.520	9.757	1.695	1.00	30.17	7	B	N
ATOM	5681	CA	SER B 338	29.385	10.142	2.516	1.00	33.37	6	B	C
ATOM	5682	C	SER B 338	29.800	11.045	3.677	1.00	34.15	6	B	C
ATOM	5683	O	SER B 338	31.002	11.151	3.973	1.00	32.91	8	B	O
ATOM	5684	CB	SER B 338	28.713	8.864	3.083	1.00	32.45	6	B	C
ATOM	5685	OG	SER B 338	28.122	8.140	1.996	1.00	36.36	8	B	O
ATOM	5686	N	ASP B 339	28.833	11.716	4.276	1.00	32.64	7	B	N
ATOM	5687	CA	ASP B 339	29.123	12.543	5.459	1.00	33.08	6	B	C
ATOM	5688	C	ASP B 339	28.771	11.783	6.743	1.00	31.48	6	B	C
ATOM	5689	O	ASP B 339	28.061	10.776	6.693	1.00	30.14	8	B	O
ATOM	5690	CB	ASP B 339	28.332	13.843	5.380	1.00	33.41	6	B	C
ATOM	5691	CG	ASP B 339	28.667	14.684	4.144	1.00	35.37	6	B	C
ATOM	5692	OD1	ASP B 339	29.844	14.845	3.771	1.00	34.95	8	B	O
ATOM	5693	OD2	ASP B 339	27.706	15.213	3.558	1.00	33.05	8	B	O
ATOM	5694	N	PRO B 340	29.166	12.275	7.896	1.00	29.22	7	B	N
ATOM	5695	CA	PRO B 340	28.815	11.718	9.180	1.00	28.14	6	B	C
ATOM	5696	C	PRO B 340	27.357	12.086	9.472	1.00	25.74	6	B	C
ATOM	5697	O	PRO B 340	26.698	11.384	10.200	1.00	24.19	8	B	O
ATOM	5698	CB	PRO B 340	29.775	12.420	10.147	1.00	29.86	6	B	C
ATOM	5699	CG	PRO B 340	29.905	13.780	9.533	1.00	28.61	6	B	C
ATOM	5700	CD	PRO B 340	30.012	13.498	8.062	1.00	28.95	6	B	C
ATOM	5701	N	THR B 341	26.887	13.199	8.904	1.00	23.44	7	B	N
ATOM	5702	CA	THR B 341	25.473	13.568	9.091	1.00	23.92	6	B	C
ATOM	5703	C	THR B 341	25.051	14.596	8.056	1.00	24.19	6	B	C
ATOM	5704	O	THR B 341	25.904	15.348	7.581	1.00	22.73	8	B	O
ATOM	5705	CB	THR B 341	25.158	14.145	10.463	1.00	25.04	6	B	C
ATOM	5706	OG1	THR B 341	23.775	14.478	10.630	1.00	24.63	8	B	O
ATOM	5707	CG2	THR B 341	25.953	15.453	10.677	1.00	22.26	6	B	C
ATOM	5708	N	ALA B 342	23.735	14.645	7.763	1.00	22.92	7	B	N
ATOM	5709	CA	ALA B 342	23.347	15.748	6.864	1.00	22.11	6	B	C
ATOM	5710	C	ALA B 342	22.030	16.306	7.362	1.00	21.35	6	B	C
ATOM	5711	O	ALA B 342	21.211	16.620	6.523	1.00	20.72	8	B	O
ATOM	5712	CB	ALA B 342	23.261	15.260	5.429	1.00	22.31	6	B	C
ATOM	5713	N	LEU B 343	21.802	16.321	8.664	1.00	21.07	7	B	N
ATOM	5714	CA	LEU B 343	20.525	16.707	9.241	1.00	20.00	6	B	C
ATOM	5715	C	LEU B 343	20.080	18.101	8.880	1.00	19.25	6	B	C
ATOM	5716	O	LEU B 343	18.894	18.276	8.568	1.00	18.77	8	B	O
ATOM	5717	CB	LEU B 343	20.474	16.429	10.750	1.00	20.57	6	B	C
ATOM	5718	CG	LEU B 343	19.135	16.716	11.426	1.00	19.47	6	B	C
ATOM	5719	CD1	LEU B 343	18.089	15.683	10.989	1.00	18.44	6	B	C
ATOM	5720	CD2	LEU B 343	19.291	16.671	12.940	1.00	20.07	6	B	C
ATOM	5721	N	PRO B 344	20.902	19.130	9.040	1.00	19.73	7	B	N
ATOM	5722	CA	PRO B 344	20.501	20.471	8.677	1.00	20.43	6	B	C
ATOM	5723	C	PRO B 344	20.083	20.510	7.199	1.00	20.37	6	B	C
ATOM	5724	O	PRO B 344	19.067	21.095	6.935	1.00	19.15	8	B	O
ATOM	5725	CB	PRO B 344	21.718	21.355	8.996	1.00	20.70	6	B	C
ATOM	5726	CG	PRO B 344	22.366	20.559	10.118	1.00	19.10	6	B	C
ATOM	5727	CD	PRO B 344	22.263	19.096	9.633	1.00	20.08	6	B	C
ATOM	5728	N	ALA B 345	20.790	19.832	6.288	1.00	19.29	7	B	N
ATOM	5729	CA	ALA B 345	20.345	19.811	4.895	1.00	21.84	6	B	C
ATOM	5730	C	ALA B 345	18.958	19.166	4.806	1.00	21.56	6	B	C
ATOM	5731	O	ALA B 345	18.124	19.560	3.990	1.00	20.68	8	B	O
ATOM	5732	CB	ALA B 345	21.350	19.037	4.037	1.00	19.71	6	B	C
ATOM	5733	N	ALA B 346	18.824	18.038	5.513	1.00	20.65	7	B	N
ATOM	5734	CA	ALA B 346	17.542	17.327	5.509	1.00	21.03	6	B	C
ATOM	5735	C	ALA B 346	16.410	18.226	5.980	1.00	20.04	6	B	C
ATOM	5736	O	ALA B 346	15.226	18.130	5.544	1.00	19.04	8	B	O
ATOM	5737	CB	ALA B 346	17.718	16.028	6.320	1.00	18.05	6	B	C
ATOM	5738	N	GLY B 347	16.686	19.183	6.854	1.00	19.49	7	B	N
ATOM	5739	CA	GLY B 347	15.696	20.161	7.284	1.00	17.62	6	B	C
ATOM	5740	C	GLY B 347	15.214	21.064	6.136	1.00	18.11	6	B	C
ATOM	5741	O	GLY B 347	14.044	21.441	6.005	1.00	17.02	8	B	O
ATOM	5742	N	MET B 348	16.163	21.509	5.339	1.00	18.39	7	B	N
ATOM	5743	CA	MET B 348	15.878	22.319	4.158	1.00	19.55	6	B	C
ATOM	5744	C	MET B 348	15.075	21.447	3.172	1.00	18.28	6	B	C
ATOM	5745	O	MET B 348	14.118	21.923	2.617	1.00	19.07	8	B	O
ATOM	5746	CB	MET B 348	17.194	22.715	3.480	1.00	18.34	6	B	C
ATOM	5747	CG	MET B 348	17.017	23.487	2.175	1.00	19.44	6	B	C
ATOM	5748	SE	MET B 348	16.136	25.272	2.525	1.00	46.72	34	B	SE
ATOM	5749	CE2	MET B 348	14.262	24.901	1.597	1.00	19.59	6	B	C
ATOM	5750	N	VAL B 349	15.418	20.181	2.935	1.00	18.23	7	B	N
ATOM	5751	CA	VAL B 349	14.581	19.347	2.073	1.00	17.07	6	B	C
ATOM	5752	C	VAL B 349	13.155	19.255	2.596	1.00	17.42	6	B	C
ATOM	5753	O	VAL B 349	12.131	19.351	1.900	1.00	15.01	8	B	O
ATOM	5754	CB	VAL B 349	15.194	17.920	2.018	1.00	17.76	6	B	C
ATOM	5755	CG1	VAL B 349	14.332	17.100	1.078	1.00	15.57	6	B	C
ATOM	5756	CG2	VAL B 349	16.627	18.044	1.433	1.00	14.78	6	B	C
ATOM	5757	N	MET B 350	13.036	19.097	3.911	1.00	16.20	7	B	N
ATOM	5758	CA	MET B 350	11.693	18.989	4.500	1.00	19.37	6	B	C

74/188

ATOM	5759	C	MET B 350	10.903	20.289	4.382	1.00	19.27	6	B	C
ATOM	5760	O	MET B 350	9.706	20.247	4.118	1.00	20.17	8	B	O
ATOM	5761	CB	MET B 350	11.797	18.581	5.990	1.00	19.80	6	B	C
ATOM	5762	CG	MET B 350	10.422	18.233	6.530	1.00	19.63	6	B	C
ATOM	5763	SE	MET B 350	10.465	18.138	8.559	1.00	37.73	34	B	SE
ATOM	5764	CE2	MET B 350	8.451	17.645	8.849	1.00	14.46	6	B	C
ATOM	5765	N	GLU B 351	11.541	21.451	4.543	1.00	18.71	7	B	N
ATOM	5766	CA	GLU B 351	10.859	22.728	4.332	1.00	16.35	6	B	C
ATOM	5767	C	GLU B 351	10.305	22.824	2.902	1.00	17.52	6	B	C
ATOM	5768	O	GLU B 351	9.169	23.204	2.624	1.00	16.16	8	B	O
ATOM	5769	CB	GLU B 351	11.860	23.890	4.606	1.00	16.75	6	B	C
ATOM	5770	CG	GLU B 351	11.320	25.260	4.159	1.00	16.05	6	B	C
ATOM	5771	CD	GLU B 351	12.290	26.387	4.481	1.00	19.74	6	B	C
ATOM	5772	OE1	GLU B 351	12.941	26.357	5.543	1.00	21.32	8	B	O
ATOM	5773	OE2	GLU B 351	12.266	27.435	3.789	1.00	21.88	8	B	O
ATOM	5774	N	ALA B 352	11.141	22.398	1.953	1.00	15.50	7	B	N
ATOM	5775	CA	ALA B 352	10.749	22.447	0.549	1.00	17.85	6	B	C
ATOM	5776	C	ALA B 352	9.580	21.538	0.199	1.00	16.38	6	B	C
ATOM	5777	O	ALA B 352	8.715	21.958	-0.580	1.00	15.68	8	B	O
ATOM	5778	CB	ALA B 352	11.994	22.118	-0.295	1.00	17.71	6	B	C
ATOM	5779	N	VAL B 353	9.544	20.341	0.753	1.00	14.89	7	B	N
ATOM	5780	CA	VAL B 353	8.564	19.335	0.405	1.00	16.58	6	B	C
ATOM	5781	C	VAL B 353	7.228	19.768	1.040	1.00	18.07	6	B	C
ATOM	5782	O	VAL B 353	6.175	19.761	0.400	1.00	17.91	8	B	O
ATOM	5783	CB	VAL B 353	9.058	17.988	0.942	1.00	18.09	6	B	C
ATOM	5784	CG1	VAL B 353	7.925	17.023	1.160	1.00	19.91	6	B	C
ATOM	5785	CG2	VAL B 353	10.188	17.454	0.070	1.00	16.84	6	B	C
ATOM	5786	N	VAL B 354	7.283	20.183	2.278	1.00	14.02	7	B	N
ATOM	5787	CA	VAL B 354	6.091	20.750	2.940	1.00	16.15	6	B	C
ATOM	5788	C	VAL B 354	5.561	21.918	2.120	1.00	18.59	6	B	C
ATOM	5789	O	VAL B 354	4.340	21.998	1.828	1.00	16.51	8	B	O
ATOM	5790	CB	VAL B 354	6.429	21.137	4.385	1.00	14.63	6	B	C
ATOM	5791	CG1	VAL B 354	5.338	22.013	4.976	1.00	15.18	6	B	C
ATOM	5792	CG2	VAL B 354	6.703	19.913	5.313	1.00	11.74	6	B	C
ATOM	5793	N	ALA B 355	6.401	22.915	1.791	1.00	19.04	7	B	N
ATOM	5794	CA	ALA B 355	5.877	24.022	0.960	1.00	19.24	6	B	C
ATOM	5795	C	ALA B 355	5.280	23.564	-0.358	1.00	20.63	6	B	C
ATOM	5796	O	ALA B 355	4.239	24.058	-0.867	1.00	20.03	8	B	O
ATOM	5797	CB	ALA B 355	7.013	25.047	0.698	1.00	19.97	6	B	C
ATOM	5798	N	THR B 356	5.859	22.559	-0.990	1.00	19.55	7	B	N
ATOM	5799	CA	THR B 356	5.336	21.994	-2.235	1.00	19.72	6	B	C
ATOM	5800	C	THR B 356	3.912	21.487	-2.050	1.00	19.32	6	B	C
ATOM	5801	O	THR B 356	3.046	21.789	-2.876	1.00	18.78	8	B	O
ATOM	5802	CB	THR B 356	6.277	20.910	-2.793	1.00	19.19	6	B	C
ATOM	5803	OG1	THR B 356	7.587	21.469	-3.056	1.00	20.23	8	B	O
ATOM	5804	CG2	THR B 356	5.794	20.273	-4.080	1.00	18.30	6	B	C
ATOM	5805	N	VAL B 357	3.713	20.611	-1.059	1.00	20.05	7	B	N
ATOM	5806	CA	VAL B 357	2.406	19.992	-0.813	1.00	19.10	6	B	C
ATOM	5807	C	VAL B 357	1.353	21.048	-0.551	1.00	18.44	6	B	C
ATOM	5808	O	VAL B 357	0.216	21.008	-1.056	1.00	14.83	8	B	O
ATOM	5809	CB	VAL B 357	2.502	18.962	0.344	1.00	17.16	6	B	C
ATOM	5810	CG1	VAL B 357	1.116	18.506	0.804	1.00	15.11	6	B	C
ATOM	5811	CG2	VAL B 357	3.309	17.746	-0.115	1.00	14.11	6	B	C
ATOM	5812	N	LEU B 358	1.753	22.020	0.251	1.00	17.86	7	B	N
ATOM	5813	CA	LEU B 358	0.848	23.158	0.530	1.00	19.47	6	B	C
ATOM	5814	C	LEU B 358	0.549	23.959	-0.721	1.00	18.30	6	B	C
ATOM	5815	O	LEU B 358	-0.596	24.335	-0.887	1.00	18.64	8	B	O
ATOM	5816	CB	LEU B 358	1.438	24.156	1.525	1.00	21.45	6	B	C
ATOM	5817	CG	LEU B 358	1.027	23.998	2.981	1.00	27.54	6	B	C
ATOM	5818	CD1	LEU B 358	-0.494	24.222	3.087	1.00	27.71	6	B	C
ATOM	5819	CD2	LEU B 358	1.454	22.608	3.400	1.00	27.05	6	B	C
ATOM	5820	N	ALA B 359	1.553	24.270	-1.543	1.00	18.38	7	B	N
ATOM	5821	CA	ALA B 359	1.200	24.998	-2.780	1.00	17.45	6	B	C
ATOM	5822	C	ALA B 359	0.216	24.099	-3.556	1.00	18.18	6	B	C
ATOM	5823	O	ALA B 359	-0.679	24.651	-4.205	1.00	18.51	8	B	O
ATOM	5824	CB	ALA B 359	2.424	25.293	-3.591	1.00	17.41	6	B	C
ATOM	5825	N	GLN B 360	0.505	22.792	-3.670	1.00	16.88	7	B	N
ATOM	5826	CA	GLN B 360	-0.401	21.970	-4.468	1.00	18.37	6	B	C
ATOM	5827	C	GLN B 360	-1.840	22.018	-3.944	1.00	19.98	6	B	C
ATOM	5828	O	GLN B 360	-2.812	22.077	-4.697	1.00	18.26	8	B	O
ATOM	5829	CB	GLN B 360	0.045	20.503	-4.427	1.00	20.25	6	B	C
ATOM	5830	CG	GLN B 360	1.247	20.229	-5.351	1.00	18.91	6	B	C
ATOM	5831	CD	GLN B 360	1.762	18.810	-5.110	1.00	19.51	6	B	C
ATOM	5832	OE1	GLN B 360	2.212	18.423	-4.035	1.00	19.04	8	B	O
ATOM	5833	NE2	GLN B 360	1.790	17.998	-6.161	1.00	19.39	7	B	N
ATOM	5834	N	GLU B 361	-1.987	21.995	-2.613	1.00	18.20	7	B	N
ATOM	5835	CA	GLU B 361	-3.310	22.034	-1.999	1.00	19.41	6	B	C
ATOM	5836	C	GLU B 361	-3.978	23.380	-2.298	1.00	19.83	6	B	C
ATOM	5837	O	GLU B 361	-5.211	23.434	-2.574	1.00	17.36	8	B	O

75/188

ATOM	5838	CB	GLU	B	361	-3.279	21.831	-0.471	1.00	19.22	6	B	C
ATOM	5839	CG	GLU	B	361	-4.695	21.573	0.095	1.00	19.30	6	B	C
ATOM	5840	CD	GLU	B	361	-5.169	20.186	-0.345	1.00	22.36	6	B	C
ATOM	5841	OE1	GLU	B	361	-4.283	19.333	-0.604	1.00	20.11	8	B	O
ATOM	5842	OE2	GLU	B	361	-6.383	19.908	-0.441	1.00	20.16	8	B	O
ATOM	5843	N	ILE	B	362	-3.186	24.459	-2.183	1.00	15.85	7	B	N
ATOM	5844	CA	ILE	B	362	-3.790	25.764	-2.524	1.00	17.59	6	B	C
ATOM	5845	C	ILE	B	362	-4.261	25.847	-3.969	1.00	17.78	6	B	C
ATOM	5846	O	ILE	B	362	-5.281	26.451	-4.297	1.00	15.69	8	B	O
ATOM	5847	CB	ILE	B	362	-2.758	26.861	-2.151	1.00	19.02	6	B	C
ATOM	5848	CG1	ILE	B	362	-2.787	27.007	-0.617	1.00	20.52	6	B	C
ATOM	5849	CG2	ILE	B	362	-2.990	28.179	-2.886	1.00	16.26	6	B	C
ATOM	5850	CD1	ILE	B	362	-1.572	27.761	-0.074	1.00	22.80	6	B	C
ATOM	5851	N	LEU	B	363	-3.445	25.384	-4.922	1.00	18.08	7	B	N
ATOM	5852	CA	LEU	B	363	-3.797	25.426	-6.325	1.00	19.04	6	B	C
ATOM	5853	C	LEU	B	363	-5.013	24.556	-6.607	1.00	19.46	6	B	C
ATOM	5854	O	LEU	B	363	-5.765	24.844	-7.522	1.00	19.47	8	B	O
ATOM	5855	CB	LEU	B	363	-2.600	24.996	-7.175	1.00	18.10	6	B	C
ATOM	5856	CG	LEU	B	363	-1.383	25.926	-7.065	1.00	18.20	6	B	C
ATOM	5857	CD1	LEU	B	363	-0.248	25.440	-7.971	1.00	15.50	6	B	C
ATOM	5858	CD2	LEU	B	363	-1.784	27.336	-7.462	1.00	19.24	6	B	C
ATOM	5859	N	GLU	B	364	-5.176	23.512	-5.793	1.00	18.05	7	B	N
ATOM	5860	CA	GLU	B	364	-6.375	22.707	-6.001	1.00	19.81	6	B	C
ATOM	5861	C	GLU	B	364	-7.612	23.400	-5.448	1.00	18.55	6	B	C
ATOM	5862	O	GLU	B	364	-8.690	23.351	-6.068	1.00	18.99	8	B	O
ATOM	5863	CB	GLU	B	364	-6.118	21.374	-5.297	1.00	21.75	6	B	C
ATOM	5864	CG	GLU	B	364	-7.238	20.392	-5.493	1.00	28.06	6	B	C
ATOM	5865	CD	GLU	B	364	-7.122	19.170	-4.580	1.00	33.51	6	B	C
ATOM	5866	OE1	GLU	B	364	-6.014	18.650	-4.357	1.00	29.73	8	B	O
ATOM	5867	OE2	GLU	B	364	-8.234	18.780	-4.132	1.00	37.19	8	B	O
ATOM	5868	N	LYS	B	365	-7.500	24.082	-4.330	1.00	17.09	7	B	N
ATOM	5869	CA	LYS	B	365	-8.681	24.666	-3.655	1.00	17.40	6	B	C
ATOM	5870	C	LYS	B	365	-9.183	25.893	-4.360	1.00	18.79	6	B	C
ATOM	5871	O	LYS	B	365	-10.404	26.132	-4.465	1.00	18.52	8	B	O
ATOM	5872	CB	LYS	B	365	-8.405	24.927	-2.151	1.00	17.93	6	B	C
ATOM	5873	CG	LYS	B	365	-9.538	25.732	-1.437	1.00	17.62	6	B	C
ATOM	5874	CD	LYS	B	365	-9.391	25.639	0.070	1.00	19.77	6	B	C
ATOM	5875	CE	LYS	B	365	-10.381	26.533	0.854	1.00	17.96	6	B	C
ATOM	5876	NZ	LYS	B	365	-11.728	26.506	0.184	1.00	16.93	7	B	N
ATOM	5877	N	PHE	B	366	-8.284	26.724	-4.883	1.00	19.54	7	B	N
ATOM	5878	CA	PHE	B	366	-8.661	28.000	-5.461	1.00	18.50	6	B	C
ATOM	5879	C	PHE	B	366	-8.386	28.114	-6.968	1.00	18.68	6	B	C
ATOM	5880	O	PHE	B	366	-7.412	27.590	-7.483	1.00	17.78	8	B	O
ATOM	5881	CB	PHE	B	366	-7.849	29.087	-4.733	1.00	16.95	6	B	C
ATOM	5882	CG	PHE	B	366	-7.941	29.170	-3.239	1.00	17.58	6	B	C
ATOM	5883	CD	PHE	B	366	-6.942	28.729	-2.391	1.00	16.25	6	B	C
ATOM	5884	CD2	PHE	B	366	-9.106	29.667	-2.671	1.00	16.37	6	B	C
ATOM	5885	CE1	PHE	B	366	-7.081	28.840	-1.005	1.00	14.38	6	B	C
ATOM	5886	CE2	PHE	B	366	-9.286	29.796	-1.298	1.00	16.17	6	B	C
ATOM	5887	CZ	PHE	B	366	-8.261	29.385	-0.479	1.00	17.22	6	B	C
ATOM	5888	N	SER	B	367	-9.225	28.906	-7.606	1.00	19.07	7	B	N
ATOM	5889	CA	SER	B	367	-9.093	29.304	-9.008	1.00	18.75	6	B	C
ATOM	5890	C	SER	B	367	-7.635	29.709	-9.144	1.00	19.01	6	B	C
ATOM	5891	O	SER	B	367	-7.294	30.647	-8.420	1.00	18.88	8	B	O
ATOM	5892	CB	SER	B	367	-9.940	30.551	-9.335	1.00	18.57	6	B	C
ATOM	5893	CG	SER	B	367	-11.322	30.367	-9.112	1.00	16.32	8	B	O
ATOM	5894	N	SER	B	368	-6.883	29.077	-10.019	1.00	18.35	7	B	N
ATOM	5895	CA	SER	B	368	-5.471	29.395	-10.062	1.00	18.37	6	B	C
ATOM	5896	C	SER	B	368	-4.791	29.143	-11.379	1.00	19.88	6	B	C
ATOM	5897	O	SER	B	368	-3.628	28.781	-11.428	1.00	19.44	8	B	O
ATOM	5898	CB	SER	B	368	-4.867	28.540	-8.917	1.00	17.70	6	B	C
ATOM	5899	CG	SER	B	368	-5.027	27.155	-9.219	1.00	19.41	8	B	O
ATOM	5900	N	ASP	B	369	-5.432	29.446	-12.517	1.00	21.79	7	B	N
ATOM	5901	CA	ASP	B	369	-4.782	29.388	-13.839	1.00	19.59	6	B	C
ATOM	5902	C	ASP	B	369	-3.758	30.519	-13.923	1.00	18.13	6	B	C
ATOM	5903	O	ASP	B	369	-2.749	30.475	-14.612	1.00	19.58	8	B	O
ATOM	5904	CB	ASP	B	369	-5.806	29.573	-14.978	1.00	19.73	6	B	C
ATOM	5905	CG	ASP	B	369	-6.579	28.283	-15.248	1.00	23.28	6	B	C
ATOM	5906	OD1	ASP	B	369	-6.075	27.221	-14.816	1.00	23.39	8	B	O
ATOM	5907	OD2	ASP	B	369	-7.655	28.367	-15.915	1.00	22.53	8	B	O
ATOM	5908	N	ASN	B	370	-4.017	31.591	-13.175	1.00	18.41	7	B	N
ATOM	5909	CA	ASN	B	370	-3.073	32.731	-13.192	1.00	20.02	6	B	C
ATOM	5910	C	ASN	B	370	-2.961	33.286	-11.793	1.00	18.68	6	B	C
ATOM	5911	O	ASN	B	370	-3.868	33.079	-10.956	1.00	19.54	8	B	O
ATOM	5912	CB	ASN	B	370	-3.438	33.755	-14.268	1.00	16.34	6	B	C
ATOM	5913	CG	ASN	B	370	-4.832	34.329	-14.094	1.00	18.20	6	B	C
ATOM	5914	OD1	ASN	B	370	-4.986	35.152	-13.188	1.00	16.79	8	B	O
ATOM	5915	ND2	ASN	B	370	-5.844	33.926	-14.878	1.00	15.36	7	B	N
ATOM	5916	N	LEU	B	371	-1.928	34.032	-11.501	1.00	19.07	7	B	N

76/188

ATOM	5917	CA	LEU	B	371	-1.656	34.561	-10.188	1.00	19.75	6	B	C
ATOM	5918	C	LEU	B	371	-2.672	35.614	-9.731	1.00	19.96	6	B	C
ATOM	5919	O	LEU	B	371	-3.055	35.626	-8.572	1.00	19.30	8	B	O
ATOM	5920	CB	LEU	B	371	-0.245	35.157	-10.034	1.00	20.03	6	B	C
ATOM	5921	CG	LEU	B	371	0.170	35.666	-8.663	1.00	20.95	6	B	C
ATOM	5922	CD1	LEU	B	371	0.080	34.552	-7.574	1.00	18.50	6	B	C
ATOM	5923	CD2	LEU	B	371	1.595	36.212	-8.601	1.00	19.28	6	B	C
ATOM	5924	N	GLU	B	372	-3.183	36.420	-10.631	1.00	21.08	7	B	N
ATOM	5925	CA	GLU	B	372	-4.097	37.485	-10.253	1.00	21.77	6	B	C
ATOM	5926	C	GLU	B	372	-5.393	36.909	-9.677	1.00	20.44	6	B	C
ATOM	5927	O	GLU	B	372	-5.820	37.291	-8.583	1.00	16.26	8	B	O
ATOM	5928	CB	GLU	B	372	-4.343	38.331	-11.527	1.00	25.36	6	B	C
ATOM	5929	CG	GLU	B	372	-5.264	39.507	-11.217	1.00	27.67	6	B	C
ATOM	5930	CD	GLU	B	372	-5.474	40.387	-12.437	1.00	32.64	6	B	C
ATOM	5931	OE1	GLU	B	372	-6.148	40.020	-13.421	1.00	33.19	8	B	O
ATOM	5932	OE2	GLU	B	372	-4.943	41.509	-12.389	1.00	35.61	8	B	O
ATOM	5933	N	GLU	B	373	-5.943	35.925	-10.402	1.00	19.35	7	B	N
ATOM	5934	CA	GLU	B	373	-7.172	35.276	-9.943	1.00	20.95	6	B	C
ATOM	5935	C	GLU	B	373	-6.973	34.493	-8.654	1.00	19.86	6	B	C
ATOM	5936	O	GLU	B	373	-7.883	34.382	-7.818	1.00	20.42	8	B	O
ATOM	5937	CB	GLU	B	373	-7.812	34.446	-11.060	1.00	19.83	6	B	C
ATOM	5938	CG	GLU	B	373	-7.268	33.099	-11.437	1.00	20.04	6	B	C
ATOM	5939	CD	GLU	B	373	-7.976	32.406	-12.601	1.00	21.26	6	B	C
ATOM	5940	OE1	GLU	B	373	-8.693	33.048	-13.417	1.00	20.31	8	B	O
ATOM	5941	OE2	GLU	B	373	-7.773	31.187	-12.778	1.00	20.48	8	B	O
ATOM	5942	N	LEU	B	374	-5.788	33.893	-8.528	1.00	20.63	7	B	N
ATOM	5943	CA	LEU	B	374	-5.439	33.132	-7.317	1.00	19.37	6	B	C
ATOM	5944	C	LEU	B	374	-5.402	34.101	-6.133	1.00	18.50	6	B	C
ATOM	5945	O	LEU	B	374	-5.994	33.877	-5.071	1.00	17.81	8	B	O
ATOM	5946	CB	LEU	B	374	-4.126	32.387	-7.506	1.00	18.82	6	B	C
ATOM	5947	CG	LEU	B	374	-3.514	31.740	-6.235	1.00	22.30	6	B	C
ATOM	5948	CD1	LEU	B	374	-4.465	30.660	-5.707	1.00	22.85	6	B	C
ATOM	5949	CD2	LEU	B	374	-2.182	31.096	-6.553	1.00	21.43	6	B	C
ATOM	5950	N	LYS	B	375	-4.679	35.200	-6.293	1.00	17.90	7	B	N
ATOM	5951	CA	LYS	B	375	-4.641	36.185	-5.171	1.00	19.17	6	B	C
ATOM	5952	C	LYS	B	375	-6.027	36.712	-4.860	1.00	18.00	6	B	C
ATOM	5953	O	LYS	B	375	-6.290	36.816	-3.659	1.00	18.32	8	B	O
ATOM	5954	CB	LYS	B	375	-3.739	37.379	-5.504	1.00	20.49	6	B	C
ATOM	5955	CG	LYS	B	375	-2.279	36.997	-5.610	1.00	22.31	6	B	C
ATOM	5956	CD	LYS	B	375	-1.427	38.174	-6.166	1.00	27.38	6	B	C
ATOM	5957	CE	LYS	B	375	-1.505	39.348	-5.192	1.00	29.73	6	B	C
ATOM	5958	NZ	LYS	B	375	-0.663	40.508	-5.606	1.00	30.61	7	B	N
ATOM	5959	N	GLN	B	376	-6.879	37.013	-5.848	1.00	17.31	7	B	N
ATOM	5960	CA	GLN	B	376	-8.208	37.503	-5.524	1.00	22.25	6	B	C
ATOM	5961	C	GLN	B	376	-9.046	36.464	-4.783	1.00	20.86	6	B	C
ATOM	5962	O	GLN	B	376	-9.765	36.783	-3.826	1.00	18.13	8	B	O
ATOM	5963	CB	GLN	B	376	-8.935	37.993	-6.779	1.00	26.58	6	B	C
ATOM	5964	CG	AGLN	B	376	-8.665	39.419	-7.179	0.50	27.63	6	B	C
ATOM	5965	CG	BGLN	B	376	-10.409	38.345	-6.561	0.50	31.04	6	B	C
ATOM	5966	CD	AGLN	B	376	-8.680	39.780	-8.643	0.50	30.46	6	B	C
ATOM	5967	CD	BGLN	B	376	-10.986	38.847	-7.871	0.50	34.69	6	B	C
ATOM	5968	OE1AGLN	B	376	-8.928	38.963	-9.542	0.50	31.64	8	B	O	
ATOM	5969	OE1BGLN	B	376	-10.516	38.465	-8.951	0.50	36.39	8	B	O	
ATOM	5970	NE2AGLN	B	376	-8.359	41.047	-8.955	0.50	29.34	7	B	N	
ATOM	5971	NE2BGLN	B	376	-11.993	39.701	-7.845	0.50	36.17	7	B	N	
ATOM	5972	N	ALA	B	377	-8.974	35.196	-5.207	1.00	20.71	7	B	N
ATOM	5973	CA	ALA	B	377	-9.730	34.154	-4.522	1.00	20.39	6	B	C
ATOM	5974	C	ALA	B	377	-9.264	33.988	-3.072	1.00	20.21	6	B	C
ATOM	5975	O	ALA	B	377	-10.082	33.755	-2.172	1.00	19.73	8	B	O
ATOM	5976	CB	ALA	B	377	-9.492	32.804	-5.231	1.00	22.01	6	B	C
ATOM	5977	N	VAL	B	378	-7.970	33.896	-2.837	1.00	17.41	7	B	N
ATOM	5978	CA	VAL	B	378	-7.454	33.709	-1.463	1.00	15.59	6	B	C
ATOM	5979	C	VAL	B	378	-7.868	34.904	-0.599	1.00	18.90	6	B	C
ATOM	5980	O	VAL	B	378	-8.341	34.768	0.528	1.00	15.42	8	B	O
ATOM	5981	CB	VAL	B	378	-5.924	33.529	-1.496	1.00	16.92	6	B	C
ATOM	5982	CG1	VAL	B	378	-5.292	33.554	-0.097	1.00	14.42	6	B	C
ATOM	5983	CG2	VAL	B	378	-5.602	32.163	-2.152	1.00	15.70	6	B	C
ATOM	5984	N	ALA	B	379	-7.771	36.152	-1.110	1.00	17.93	7	B	N
ATOM	5985	CA	ALA	B	379	-8.194	37.326	-0.309	1.00	20.08	6	B	C
ATOM	5986	C	ALA	B	379	-9.662	37.229	0.076	1.00	19.47	6	B	C
ATOM	5987	O	ALA	B	379	-10.109	37.551	1.193	1.00	22.45	8	B	O
ATOM	5988	CB	ALA	B	379	-7.995	38.615	-1.147	1.00	18.51	6	B	C
ATOM	5989	N	LYS	B	380	-10.466	36.797	-0.900	1.00	18.86	7	B	N
ATOM	5990	CA	LYS	B	380	-11.894	36.674	-0.688	1.00	20.96	6	B	C
ATOM	5991	C	LYS	B	380	-12.190	35.605	0.355	1.00	19.74	6	B	C
ATOM	5992	O	LYS	B	380	-13.078	35.788	1.189	1.00	18.75	8	B	O
ATOM	5993	CB	LYS	B	380	-12.683	36.442	-1.994	1.00	23.24	6	B	C
ATOM	5994	CG	LYS	B	380	-14.190	36.368	-1.715	1.00	28.51	6	B	C
ATOM	5995	CD	LYS	B	380	-14.571	37.587	-0.904	1.00	34.77	6	B	C

77/188

ATOM	5996	CE	LYS	B	380	-15.727	37.849	-0.039	1.00	36.29	6	B	C
ATOM	5997	NZ	LYS	B	380	-15.730	37.147	1.275	1.00	34.54	7	B	N
ATOM	5998	N	HIS	B	381	-11.444	34.499	0.290	1.00	20.39	7	B	N
ATOM	5999	CA	HIS	B	381	-11.644	33.397	1.225	1.00	19.71	6	B	C
ATOM	6000	C	HIS	B	381	-11.266	33.840	2.627	1.00	19.84	6	B	C
ATOM	6001	O	HIS	B	381	-11.998	33.549	3.574	1.00	19.84	8	B	O
ATOM	6002	CB	HIS	B	381	-10.791	32.180	0.809	1.00	19.13	6	B	C
ATOM	6003	CG	HIS	B	381	-10.889	31.031	1.759	1.00	19.16	6	B	C
ATOM	6004	ND1	HIS	B	381	-11.948	30.161	1.768	1.00	20.12	7	B	N
ATOM	6005	CD2	HIS	B	381	-10.031	30.610	2.738	1.00	18.69	6	B	C
ATOM	6006	CE1	HIS	B	381	-11.719	29.226	2.679	1.00	19.52	6	B	C
ATOM	6007	NE2	HIS	B	381	-10.582	29.471	3.320	1.00	18.90	7	B	N
ATOM	6008	N	ARG	B	382	-10.176	34.588	2.730	1.00	18.66	7	B	N
ATOM	6009	CA	ARG	B	382	-9.715	35.121	4.016	1.00	19.48	6	B	C
ATOM	6010	C	ARG	B	382	-10.757	36.090	4.553	1.00	20.62	6	B	C
ATOM	6011	O	ARG	B	382	-10.967	36.097	5.781	1.00	21.67	8	B	O
ATOM	6012	CB	ARG	B	382	-8.330	35.767	3.981	1.00	18.68	6	B	C
ATOM	6013	CG	AARG	B	382	-7.167	34.780	4.038	0.50	18.52	6	B	C
ATOM	6014	CG	BARG	B	382	-7.181	34.825	3.606	0.50	21.37	6	B	C
ATOM	6015	CD	AARG	B	382	-5.834	35.443	3.732	0.50	15.81	6	B	C
ATOM	6016	CD	BARG	B	382	-5.878	35.624	3.608	0.50	20.60	6	B	C
ATOM	6017	NE	AARG	B	382	-4.696	34.590	4.001	0.50	14.05	7	B	N
ATOM	6018	NE	BARG	B	382	-4.794	34.963	2.894	0.50	21.06	7	B	N
ATOM	6019	CZ	AARG	B	382	-3.556	34.642	3.303	0.50	13.55	6	B	C
ATOM	6020	CZ	BARG	B	382	-3.888	34.205	3.496	0.50	20.98	6	B	C
ATOM	6021	NH1AARG	B	382	-2.560	33.830	3.633	0.50	9.69	7	B	N	
ATOM	6022	NH1BARG	B	382	-2.868	33.587	2.947	0.50	20.11	7	B	N	
ATOM	6023	NH2AARG	B	382	-3.438	35.511	2.289	0.50	12.36	7	B	N	
ATOM	6024	NH2BARG	B	382	-4.032	34.103	4.800	0.50	21.08	7	B	N	
ATOM	6025	N	ASP	B	383	-11.352	36.885	3.680	1.00	20.71	7	B	N
ATOM	6026	CA	ASP	B	383	-12.431	37.783	4.086	1.00	22.37	6	B	C
ATOM	6027	C	ASP	B	383	-13.616	36.984	4.642	1.00	23.25	6	B	C
ATOM	6028	O	ASP	B	383	-14.169	37.325	5.684	1.00	20.59	8	B	O
ATOM	6029	CB	ASP	B	383	-12.918	38.661	2.947	1.00	24.24	6	B	C
ATOM	6030	CG	ASP	B	383	-14.103	39.532	3.336	1.00	26.34	6	B	C
ATOM	6031	OD1	ASP	B	383	-13.961	40.449	4.172	1.00	26.40	8	B	O
ATOM	6032	OD2	ASP	B	383	-15.247	39.285	2.868	1.00	26.44	8	B	O
ATOM	6033	N	TYR	B	384	-13.970	35.885	3.948	1.00	22.45	7	B	N
ATOM	6034	CA	TYR	B	384	-15.131	35.096	4.441	1.00	21.78	6	B	C
ATOM	6035	C	TYR	B	384	-14.817	34.434	5.774	1.00	20.57	6	B	C
ATOM	6036	O	TYR	B	384	-15.612	34.406	6.730	1.00	18.28	8	B	O
ATOM	6037	CB	TYR	B	384	-15.507	34.069	3.336	1.00	21.15	6	B	C
ATOM	6038	CG	TYR	B	384	-16.692	33.248	3.797	1.00	21.45	6	B	C
ATOM	6039	CD1	TYR	B	384	-17.970	33.684	3.487	1.00	21.64	6	B	C
ATOM	6040	CD2	TYR	B	384	-16.548	32.085	4.518	1.00	21.14	6	B	C
ATOM	6041	CE1	TYR	B	384	-19.091	32.975	3.883	1.00	23.28	6	B	C
ATOM	6042	CE2	TYR	B	384	-17.652	31.360	4.934	1.00	21.98	6	B	C
ATOM	6043	CZ	TYR	B	384	-18.910	31.824	4.621	1.00	22.33	6	B	C
ATOM	6044	OH	TYR	B	384	-20.031	31.140	5.025	1.00	23.19	8	B	O
ATOM	6045	N	THR	B	385	-13.643	33.861	5.875	1.00	19.26	7	B	N
ATOM	6046	CA	THR	B	385	-13.157	33.255	7.107	1.00	22.52	6	B	C
ATOM	6047	C	THR	B	385	-13.219	34.217	8.288	1.00	21.85	6	B	C
ATOM	6048	O	THR	B	385	-13.783	33.894	9.322	1.00	21.08	8	B	O
ATOM	6049	CB	THR	B	385	-11.686	32.790	7.000	1.00	22.47	6	B	C
ATOM	6050	OG1	THR	B	385	-11.623	31.792	6.009	1.00	22.72	8	B	O
ATOM	6051	CG2	THR	B	385	-11.207	32.213	8.353	1.00	21.90	6	B	C
ATOM	6052	N	LYS	B	386	-12.629	35.395	8.149	1.00	22.88	7	B	N
ATOM	6053	CA	LYS	B	386	-12.582	36.370	9.240	1.00	21.78	6	B	C
ATOM	6054	C	LYS	B	386	-13.970	36.766	9.723	1.00	21.03	6	B	C
ATOM	6055	O	LYS	B	386	-14.147	37.033	10.941	1.00	17.99	8	B	O
ATOM	6056	CB	LYS	B	386	-11.854	37.623	8.764	1.00	25.55	6	B	C
ATOM	6057	CG	LYS	B	386	-11.985	38.881	9.620	1.00	25.75	6	B	C
ATOM	6058	CD	LYS	B	386	-11.346	38.631	10.954	1.00	31.27	6	B	C
ATOM	6059	CE	LYS	B	386	-10.615	39.877	11.495	1.00	34.90	6	B	C
ATOM	6060	NZ	LYS	B	386	-11.465	41.088	11.404	1.00	36.25	7	B	N
ATOM	6061	N	ASN	B	387	-14.897	36.861	8.782	1.00	19.48	7	B	N
ATOM	6062	CA	ASN	B	387	-16.224	37.375	9.106	1.00	20.62	6	B	C
ATOM	6063	C	ASN	B	387	-17.263	36.296	9.328	1.00	22.18	6	B	C
ATOM	6064	O	ASN	B	387	-18.463	36.563	9.506	1.00	21.10	8	B	O
ATOM	6065	CB	ASN	B	387	-16.650	38.347	7.990	1.00	21.56	6	B	C
ATOM	6066	CG	ASN	B	387	-15.782	39.605	8.148	1.00	25.29	6	B	C
ATOM	6067	OD1	ASN	B	387	-16.112	40.433	9.024	1.00	25.63	8	B	O
ATOM	6068	ND2	ASN	B	387	-14.686	39.730	7.395	1.00	22.17	7	B	N
ATOM	6069	N	TYR	B	388	-16.813	35.022	9.366	1.00	21.52	7	B	N
ATOM	6070	CA	TYR	B	388	-17.809	33.965	9.591	1.00	21.64	6	B	C
ATOM	6071	C	TYR	B	388	-18.520	34.129	10.948	1.00	20.98	6	B	C
ATOM	6072	O	TYR	B	388	-19.693	33.731	10.932	1.00	22.87	8	B	O
ATOM	6073	CB	TYR	B	388	-17.128	32.607	9.527	1.00	21.52	6	B	C
ATOM	6074	CG	TYR	B	388	-17.947	31.348	9.573	1.00	22.15	6	B	C

78/188

ATOM	6075	CD1	TYR	B	388	-18.638	30.876	8.476	1.00	21.45	6	B	C
ATOM	6076	CD2	TYR	B	388	-17.925	30.531	10.708	1.00	22.44	6	B	C
ATOM	6077	CE1	TYR	B	388	-19.379	29.705	8.507	1.00	21.98	6	B	C
ATOM	6078	CE2	TYR	B	388	-18.690	29.360	10.761	1.00	22.69	6	B	C
ATOM	6079	CZ	TYR	B	388	-19.360	28.929	9.652	1.00	23.29	6	B	C
ATOM	6080	OH	TYR	B	388	-20.043	27.724	9.684	1.00	23.48	8	B	O
ATOM	6081	OT	TYR	B	388	-17.922	34.391	12.017	1.00	19.14	8	B	O
ATOM	6083	N	MET	C	1	-13.693	16.270	-8.652	1.00	19.90	7	C	N
ATOM	6084	CA	MET	C	1	-14.921	15.420	-8.556	1.00	22.22	6	C	C
ATOM	6085	C	MET	C	1	-14.565	14.089	-9.220	1.00	22.05	6	C	C
ATOM	6086	O	MET	C	1	-13.990	14.147	-10.326	1.00	22.94	8	C	O
ATOM	6087	CB	MET	C	1	-16.148	15.997	-9.213	1.00	20.86	6	C	C
ATOM	6088	CG	MET	C	1	-17.452	15.338	-8.785	1.00	25.06	6	C	C
ATOM	6089	SE	MET	C	1	-17.773	14.350	-10.514	1.00	49.23	34	C	SE
ATOM	6090	CE2	MET	C	1	-18.700	15.931	-11.503	1.00	19.63	6	C	C
ATOM	6091	N	ARG	C	2	-14.961	13.008	-8.601	1.00	19.58	7	C	N
ATOM	6092	CA	ARG	C	2	-14.641	11.676	-9.142	1.00	18.99	6	C	C
ATOM	6093	C	ARG	C	2	-15.768	10.723	-8.788	1.00	18.75	6	C	C
ATOM	6094	O	ARG	C	2	-16.589	11.169	-7.984	1.00	17.76	8	C	O
ATOM	6095	CB	ARG	C	2	-13.326	11.167	-8.582	1.00	19.99	6	C	C
ATOM	6096	CG	ARG	C	2	-13.304	11.226	-7.073	1.00	19.14	6	C	C
ATOM	6097	CD	ARG	C	2	-11.892	11.013	-6.531	1.00	19.37	6	C	C
ATOM	6098	NE	ARG	C	2	-11.969	11.298	-5.085	1.00	17.17	7	C	N
ATOM	6099	CZ	ARG	C	2	-11.111	10.874	-4.190	1.00	17.50	6	C	C
ATOM	6100	NH1	ARG	C	2	-11.341	11.292	-2.936	1.00	16.12	7	C	N
ATOM	6101	NH2	ARG	C	2	-10.147	9.994	-4.495	1.00	16.83	7	C	N
ATOM	6102	N	TYR	C	3	-15.820	9.546	-9.408	1.00	16.17	7	C	N
ATOM	6103	CA	TYR	C	3	-16.993	8.694	-9.075	1.00	17.30	6	C	C
ATOM	6104	C	TYR	C	3	-16.710	7.279	-9.526	1.00	16.83	6	C	C
ATOM	6105	O	TYR	C	3	-15.746	7.150	-10.311	1.00	16.16	8	C	O
ATOM	6106	CB	TYR	C	3	-18.208	9.180	-9.907	1.00	15.97	6	C	C
ATOM	6107	CG	TYR	C	3	-17.973	9.377	-11.399	1.00	17.98	6	C	C
ATOM	6108	CD1	TYR	C	3	-18.406	8.382	-12.283	1.00	18.95	6	C	C
ATOM	6109	CD2	TYR	C	3	-17.368	10.492	-11.940	1.00	18.17	6	C	C
ATOM	6110	CE1	TYR	C	3	-18.271	8.523	-13.656	1.00	19.33	6	C	C
ATOM	6111	CE2	TYR	C	3	-17.162	10.624	-13.322	1.00	20.27	6	C	C
ATOM	6112	CZ	TYR	C	3	-17.631	9.635	-14.161	1.00	21.92	6	C	C
ATOM	6113	OH	TYR	C	3	-17.466	9.691	-15.532	1.00	22.20	8	C	O
ATOM	6114	N	LEU	C	4	-17.457	6.321	-9.053	1.00	15.79	7	C	N
ATOM	6115	CA	LEU	C	4	-17.381	4.942	-9.485	1.00	16.99	6	C	C
ATOM	6116	C	LEU	C	4	-18.828	4.409	-9.661	1.00	19.28	6	C	C
ATOM	6117	O	LEU	C	4	-19.724	4.810	-8.888	1.00	17.08	8	C	O
ATOM	6118	CB	LEU	C	4	-16.675	3.948	-8.537	1.00	16.06	6	C	C
ATOM	6119	CG	LEU	C	4	-15.174	4.330	-8.344	1.00	18.17	6	C	C
ATOM	6120	CD1	LEU	C	4	-14.746	3.649	-7.027	1.00	17.10	6	C	C
ATOM	6121	CD2	LEU	C	4	-14.348	3.868	-9.509	1.00	16.12	6	C	C
ATOM	6122	N	THR	C	5	-18.986	3.536	-10.654	1.00	17.50	7	C	N
ATOM	6123	CA	THR	C	5	-20.320	2.946	-10.832	1.00	19.56	6	C	C
ATOM	6124	C	THR	C	5	-20.141	1.447	-10.577	1.00	20.30	6	C	C
ATOM	6125	O	THR	C	5	-19.033	0.948	-10.781	1.00	18.53	8	C	O
ATOM	6126	CB	THR	C	5	-20.952	3.156	-12.222	1.00	18.56	6	C	C
ATOM	6127	OG1	THR	C	5	-20.220	2.500	-13.252	1.00	19.73	8	C	O
ATOM	6128	CG2	THR	C	5	-20.943	4.636	-12.651	1.00	17.76	6	C	C
ATOM	6129	N	ALA	C	6	-21.206	0.732	-10.211	1.00	18.83	7	C	N
ATOM	6130	CA	ALA	C	6	-21.092	-0.677	-9.926	1.00	18.27	6	C	C
ATOM	6131	C	ALA	C	6	-22.428	-1.363	-10.186	1.00	21.36	6	C	C
ATOM	6132	O	ALA	C	6	-23.487	-0.695	-10.170	1.00	23.29	8	C	O
ATOM	6133	CB	ALA	C	6	-20.738	-0.811	-8.426	1.00	17.78	6	C	C
ATOM	6134	N	GLY	C	7	-22.378	-2.682	-10.248	1.00	21.37	7	C	N
ATOM	6135	CA	GLY	C	7	-23.642	-3.422	-10.361	1.00	20.49	6	C	C
ATOM	6136	C	GLY	C	7	-23.602	-4.294	-11.601	1.00	19.46	6	C	C
ATOM	6137	O	GLY	C	7	-22.839	-3.966	-12.517	1.00	17.42	8	C	O
ATOM	6138	N	GLU	C	8	-24.405	-5.364	-11.516	1.00	18.65	7	C	N
ATOM	6139	CA	GLU	C	8	-24.480	-6.248	-12.691	1.00	19.69	6	C	C
ATOM	6140	C	GLU	C	8	-25.861	-6.093	-13.336	1.00	20.70	6	C	C
ATOM	6141	O	GLU	C	8	-26.822	-5.810	-12.623	1.00	20.60	8	C	O
ATOM	6142	CB	GLU	C	8	-24.265	-7.723	-12.277	1.00	17.78	6	C	C
ATOM	6143	CG	GLU	C	8	-22.788	-8.057	-12.128	1.00	19.36	6	C	C
ATOM	6144	CD	GLU	C	8	-22.125	-7.388	-10.947	1.00	21.18	6	C	C
ATOM	6145	OE1	GLU	C	8	-22.697	-7.382	-9.848	1.00	20.43	8	C	O
ATOM	6146	OE2	GLU	C	8	-21.012	-6.856	-11.076	1.00	24.29	8	C	O
ATOM	6147	N	SER	C	9	-25.961	-6.368	-14.627	1.00	21.67	7	C	N
ATOM	6148	CA	SER	C	9	-27.253	-6.312	-15.304	1.00	22.77	6	C	C
ATOM	6149	C	SER	C	9	-28.345	-7.097	-14.561	1.00	22.14	6	C	C
ATOM	6150	O	SER	C	9	-29.443	-6.538	-14.434	1.00	21.16	8	C	O
ATOM	6151	CB	SER	C	9	-27.163	-6.870	-16.729	1.00	23.53	6	C	C
ATOM	6152	OG	SER	C	9	-28.422	-6.594	-17.364	1.00	23.03	8	C	O
ATOM	6153	N	HIS	C	10	-28.114	-8.324	-14.149	1.00	20.78	7	C	N
ATOM	6154	CA	HIS	C	10	-29.154	-9.077	-13.423	1.00	23.21	6	C	C

79/188

ATOM	6155	C	HIS	C	10	-28.801	-9.280	-11.945	1.00	21.82	6	C	C
ATOM	6156	O	HIS	C	10	-29.316	-10.153	-11.247	1.00	23.04	8	C	O
ATOM	6157	CB	HIS	C	10	-29.494	-10.418	-14.100	1.00	24.27	6	C	C
ATOM	6158	CG	HIS	C	10	-29.680	-10.191	-15.586	1.00	26.96	6	C	C
ATOM	6159	ND1	HIS	C	10	-28.723	-10.564	-16.486	1.00	28.80	7	C	N
ATOM	6160	CD2	HIS	C	10	-30.690	-9.602	-16.288	1.00	26.56	6	C	C
ATOM	6161	CE1	HIS	C	10	-29.127	-10.216	-17.710	1.00	30.66	6	C	C
ATOM	6162	NE2	HIS	C	10	-30.319	-9.637	-17.600	1.00	30.36	7	C	N
ATOM	6163	N	GLY	C	11	-27.881	-8.469	-11.426	1.00	22.86	7	C	N
ATOM	6164	CA	GLY	C	11	-27.629	-8.409	-9.976	1.00	21.09	6	C	C
ATOM	6165	C	GLY	C	11	-28.826	-7.669	-9.341	1.00	21.75	6	C	C
ATOM	6166	O	GLY	C	11	-29.753	-7.264	-10.044	1.00	22.11	8	C	O
ATOM	6167	N	PRO	C	12	-28.844	-7.534	-8.026	1.00	21.07	7	C	N
ATOM	6168	CA	PRO	C	12	-29.919	-6.901	-7.319	1.00	21.79	6	C	C
ATOM	6169	C	PRO	C	12	-30.044	-5.401	-7.492	1.00	22.70	6	C	C
ATOM	6170	O	PRO	C	12	-31.140	-4.863	-7.421	1.00	22.91	8	C	O
ATOM	6171	CB	PRO	C	12	-29.595	-7.148	-5.829	1.00	20.59	6	C	C
ATOM	6172	CG	PRO	C	12	-28.118	-7.396	-5.803	1.00	23.33	6	C	C
ATOM	6173	CD	PRO	C	12	-27.758	-8.005	-7.125	1.00	20.70	6	C	C
ATOM	6174	N	ARG	C	13	-28.900	-4.704	-7.722	1.00	21.33	7	C	N
ATOM	6175	CA	ARG	C	13	-29.015	-3.245	-7.779	1.00	22.12	6	C	C
ATOM	6176	C	ARG	C	13	-27.803	-2.604	-8.426	1.00	21.08	6	C	C
ATOM	6177	O	ARG	C	13	-26.773	-3.270	-8.460	1.00	18.74	8	C	O
ATOM	6178	CB	ARG	C	13	-29.108	-2.820	-6.277	1.00	23.44	6	C	C
ATOM	6179	CG	ARG	C	13	-29.208	-1.315	-6.057	1.00	24.85	6	C	C
ATOM	6180	CD	ARG	C	13	-29.049	-1.010	-4.556	1.00	24.57	6	C	C
ATOM	6181	NE	ARG	C	13	-27.663	-0.820	-4.181	1.00	23.75	7	C	N
ATOM	6182	CZ	ARG	C	13	-27.156	-1.021	-2.962	1.00	23.89	6	C	C
ATOM	6183	NH1	ARG	C	13	-27.965	-1.394	-1.984	1.00	21.81	7	C	N
ATOM	6184	NH2	ARG	C	13	-25.848	-0.896	-2.732	1.00	22.98	7	C	N
ATOM	6185	N	LEU	C	14	-27.946	-1.408	-8.937	1.00	17.88	7	C	N
ATOM	6186	CA	LEU	C	14	-26.807	-0.687	-9.499	1.00	19.09	6	C	C
ATOM	6187	C	LEU	C	14	-26.491	0.372	-8.441	1.00	21.09	6	C	C
ATOM	6188	O	LEU	C	14	-27.440	0.747	-7.699	1.00	19.88	8	C	O
ATOM	6189	CB	LEU	C	14	-27.142	0.007	-10.808	1.00	19.22	6	C	C
ATOM	6190	CG	LEU	C	14	-27.844	-0.946	-11.814	1.00	19.36	6	C	C
ATOM	6191	CD1	LEU	C	14	-28.239	-0.202	-13.072	1.00	18.78	6	C	C
ATOM	6192	CD2	LEU	C	14	-26.972	-2.188	-12.050	1.00	18.55	6	C	C
ATOM	6193	N	THR	C	15	-25.218	0.746	-8.343	1.00	18.10	7	C	N
ATOM	6194	CA	THR	C	15	-24.874	1.767	-7.356	1.00	18.05	6	C	C
ATOM	6195	C	THR	C	15	-23.849	2.713	-7.946	1.00	18.38	6	C	C
ATOM	6196	O	THR	C	15	-23.064	2.345	-8.808	1.00	20.60	8	C	O
ATOM	6197	CB	THR	C	15	-24.301	1.158	-6.043	1.00	19.01	6	C	C
ATOM	6198	OG1	THR	C	15	-25.119	0.098	-5.569	1.00	18.70	8	C	O
ATOM	6199	CG2	THR	C	15	-24.204	2.189	-4.923	1.00	16.07	6	C	C
ATOM	6200	N	ALA	C	16	-23.865	3.963	-7.511	1.00	20.06	7	C	N
ATOM	6201	CA	ALA	C	16	-22.818	4.915	-7.913	1.00	20.19	6	C	C
ATOM	6202	C	ALA	C	16	-22.442	5.748	-6.686	1.00	18.14	6	C	C
ATOM	6203	O	ALA	C	16	-23.264	6.147	-5.842	1.00	20.33	8	C	O
ATOM	6204	CB	ALA	C	16	-23.315	5.829	-9.032	1.00	20.46	6	C	C
ATOM	6205	N	ILE	C	17	-21.190	6.134	-6.535	1.00	16.71	7	C	N
ATOM	6206	CA	ILE	C	17	-20.699	7.033	-5.554	1.00	16.28	6	C	C
ATOM	6207	C	ILE	C	17	-20.041	8.241	-6.238	1.00	18.89	6	C	C
ATOM	6208	O	ILE	C	17	-19.143	8.044	-7.065	1.00	19.32	8	C	O
ATOM	6209	CB	ILE	C	17	-19.782	6.437	-4.462	1.00	16.55	6	C	C
ATOM	6210	CG1	ILE	C	17	-20.531	5.365	-3.662	1.00	17.50	6	C	C
ATOM	6211	CG2	ILE	C	17	-19.272	7.636	-3.616	1.00	13.72	6	C	C
ATOM	6212	CD1	ILE	C	17	-19.671	4.545	-2.677	1.00	16.96	6	C	C
ATOM	6213	N	ILE	C	18	-20.416	9.463	-5.876	1.00	17.96	7	C	N
ATOM	6214	CA	ILE	C	18	-19.794	10.668	-6.418	1.00	18.18	6	C	C
ATOM	6215	C	ILE	C	18	-19.066	11.367	-5.240	1.00	19.10	6	C	C
ATOM	6216	O	ILE	C	18	-19.716	11.776	-4.302	1.00	17.02	8	C	O
ATOM	6217	CB	ILE	C	18	-20.707	11.707	-7.042	1.00	19.52	6	C	C
ATOM	6218	CG1	ILE	C	18	-21.609	10.970	-8.081	1.00	19.95	6	C	C
ATOM	6219	CG2	ILE	C	18	-19.930	12.840	-7.760	1.00	18.96	6	C	C
ATOM	6220	CD1	ILE	C	18	-22.685	11.909	-8.654	1.00	20.08	6	C	C
ATOM	6221	N	GLU	C	19	-17.770	11.626	-5.429	1.00	17.09	7	C	N
ATOM	6222	CA	GLU	C	19	-16.997	12.270	-4.368	1.00	17.99	6	C	C
ATOM	6223	C	GLU	C	19	-16.543	13.615	-4.914	1.00	18.86	6	C	C
ATOM	6224	O	GLU	C	19	-16.053	13.701	-6.050	1.00	17.62	8	C	O
ATOM	6225	CB	GLU	C	19	-15.904	11.315	-3.898	1.00	17.22	6	C	C
ATOM	6226	CG	GLU	C	19	-15.179	11.708	-2.592	1.00	18.22	6	C	C
ATOM	6227	CD	GLU	C	19	-14.376	12.992	-2.714	1.00	20.27	6	C	C
ATOM	6228	OE1	GLU	C	19	-13.453	13.046	-3.552	1.00	18.08	8	C	O
ATOM	6229	OE2	GLU	C	19	-14.618	13.962	-1.966	1.00	17.87	8	C	O
ATOM	6230	N	GLY	C	20	-16.776	14.697	-4.181	1.00	16.58	7	C	N
ATOM	6231	CA	GLY	C	20	-16.296	16.000	-4.621	1.00	20.07	6	C	C
ATOM	6232	C	GLY	C	20	-17.303	16.958	-5.234	1.00	20.43	6	C	C
ATOM	6233	O	GLY	C	20	-16.867	17.986	-5.813	1.00	19.16	8	C	O

80/188

ATOM	6234	N	ILE	C	21	-18.596	16.725	-5.080	1.00	19.01	7	C	N
ATOM	6235	CA	ILE	C	21	-19.546	17.743	-5.608	1.00	20.67	6	C	C
ATOM	6236	C	ILE	C	21	-19.550	18.864	-4.584	1.00	18.39	6	C	C
ATOM	6237	O	ILE	C	21	-19.531	18.525	-3.411	1.00	19.39	8	C	O
ATOM	6238	CB	ILE	C	21	-20.965	17.153	-5.692	1.00	20.09	6	C	C
ATOM	6239	CG1	ILE	C	21	-21.002	16.108	-6.832	1.00	20.30	6	C	C
ATOM	6240	CG2	ILE	C	21	-22.025	18.215	-5.946	1.00	20.18	6	C	C
ATOM	6241	CD1	ILE	C	21	-20.888	16.775	-8.213	1.00	20.65	6	C	C
ATOM	6242	N	PRO	C	22	-19.662	20.116	-4.931	1.00	20.84	7	C	N
ATOM	6243	CA	PRO	C	22	-19.733	21.200	-3.953	1.00	20.24	6	C	C
ATOM	6244	C	PRO	C	22	-20.957	21.088	-3.032	1.00	19.27	6	C	C
ATOM	6245	O	PRO	C	22	-22.007	20.633	-3.475	1.00	19.11	8	C	O
ATOM	6246	CB	PRO	C	22	-20.015	22.432	-4.801	1.00	20.11	6	C	C
ATOM	6247	CG	PRO	C	22	-19.742	22.069	-6.182	1.00	20.91	6	C	C
ATOM	6248	CD	PRO	C	22	-19.667	20.596	-6.330	1.00	18.67	6	C	C
ATOM	6249	N	ALA	C	23	-20.781	21.454	-1.775	1.00	19.80	7	C	N
ATOM	6250	CA	ALA	C	23	-21.906	21.548	-0.834	1.00	18.30	6	C	C
ATOM	6251	C	ALA	C	23	-22.855	22.635	-1.340	1.00	18.13	6	C	C
ATOM	6252	O	ALA	C	23	-22.400	23.607	-1.964	1.00	17.06	8	C	O
ATOM	6253	CB	ALA	C	23	-21.312	22.001	0.513	1.00	17.41	6	C	C
ATOM	6254	N	GLY	C	24	-24.154	22.493	-1.063	1.00	20.31	7	C	N
ATOM	6255	CA	GLY	C	24	-25.142	23.508	-1.365	1.00	19.38	6	C	C
ATOM	6256	C	GLY	C	24	-25.748	23.413	-2.736	1.00	22.72	6	C	C
ATOM	6257	O	GLY	C	24	-26.449	24.354	-3.081	1.00	21.50	8	C	O
ATOM	6258	N	LEU	C	25	-25.576	22.340	-3.493	1.00	20.15	7	C	N
ATOM	6259	CA	LEU	C	25	-26.254	22.247	-4.792	1.00	21.42	6	C	C
ATOM	6260	C	LEU	C	25	-27.650	21.693	-4.631	1.00	23.03	6	C	C
ATOM	6261	O	LEU	C	25	-27.726	20.563	-4.142	1.00	21.50	8	C	O
ATOM	6262	CB	LEU	C	25	-25.466	21.269	-5.686	1.00	20.72	6	C	C
ATOM	6263	CG	LEU	C	25	-26.044	20.941	-7.073	1.00	22.25	6	C	C
ATOM	6264	CD1	LEU	C	25	-26.139	22.179	-7.979	1.00	20.35	6	C	C
ATOM	6265	CD2	LEU	C	25	-25.220	19.856	-7.736	1.00	18.67	6	C	C
ATOM	6266	N	PRO	C	26	-28.726	22.411	-4.965	1.00	24.59	7	C	N
ATOM	6267	CA	PRO	C	26	-30.079	21.871	-4.941	1.00	23.76	6	C	C
ATOM	6268	C	PRO	C	26	-30.180	20.650	-5.845	1.00	23.86	6	C	C
ATOM	6269	O	PRO	C	26	-29.728	20.635	-7.004	1.00	23.41	8	C	O
ATOM	6270	CB	PRO	C	26	-30.947	23.016	-5.479	1.00	25.16	6	C	C
ATOM	6271	CG	PRO	C	26	-30.093	24.243	-5.263	1.00	25.81	6	C	C
ATOM	6272	CD	PRO	C	26	-28.667	23.788	-5.493	1.00	23.82	6	C	C
ATOM	6273	N	LEU	C	27	-30.688	19.537	-5.335	1.00	22.22	7	C	N
ATOM	6274	CA	LEU	C	27	-30.674	18.232	-5.987	1.00	22.11	6	C	C
ATOM	6275	C	LEU	C	27	-31.760	17.319	-5.481	1.00	20.97	6	C	C
ATOM	6276	O	LEU	C	27	-31.872	17.118	-4.284	1.00	20.13	8	C	O
ATOM	6277	CB	LEU	C	27	-29.295	17.554	-5.739	1.00	22.97	6	C	C
ATOM	6278	CG	LEU	C	27	-29.141	16.179	-6.403	1.00	24.33	6	C	C
ATOM	6279	CD1	LEU	C	27	-29.200	16.238	-7.937	1.00	24.82	6	C	C
ATOM	6280	CD2	LEU	C	27	-27.831	15.493	-5.997	1.00	22.94	6	C	C
ATOM	6281	N	THR	C	28	-32.588	16.751	-6.356	1.00	24.34	7	C	N
ATOM	6282	CA	THR	C	28	-33.736	15.961	-5.934	1.00	24.03	6	C	C
ATOM	6283	C	THR	C	28	-33.747	14.657	-6.720	1.00	23.46	6	C	C
ATOM	6284	O	THR	C	28	-33.069	14.613	-7.736	1.00	24.17	8	C	O
ATOM	6285	CB	THR	C	28	-35.078	16.641	-6.243	1.00	24.56	6	C	C
ATOM	6286	OG1	THR	C	28	-35.185	16.897	-7.649	1.00	24.66	8	C	O
ATOM	6287	CG2	THR	C	28	-35.293	17.973	-5.534	1.00	24.44	6	C	C
ATOM	6288	N	ALA	C	29	-34.467	13.664	-6.244	1.00	23.23	7	C	N
ATOM	6289	CA	ALA	C	29	-34.543	12.399	-6.979	1.00	23.12	6	C	C
ATOM	6290	C	ALA	C	29	-35.217	12.612	-8.321	1.00	22.61	6	C	C
ATOM	6291	O	ALA	C	29	-34.806	12.041	-9.307	1.00	23.74	8	C	O
ATOM	6292	CB	ALA	C	29	-35.319	11.403	-6.112	1.00	24.20	6	C	C
ATOM	6293	N	GLU	C	30	-36.132	13.580	-8.438	1.00	26.00	7	C	N
ATOM	6294	CA	GLU	C	30	-36.738	13.881	-9.732	1.00	28.07	6	C	C
ATOM	6295	C	GLU	C	30	-35.686	14.459	-10.679	1.00	27.22	6	C	C
ATOM	6296	O	GLU	C	30	-35.801	14.215	-11.876	1.00	26.61	8	C	O
ATOM	6297	CB	GLU	C	30	-37.914	14.859	-9.651	1.00	30.68	6	C	C
ATOM	6298	CG	GLU	C	30	-38.534	15.228	-10.992	1.00	34.29	6	C	C
ATOM	6299	CD	GLU	C	30	-39.243	14.153	-11.767	1.00	38.10	6	C	C
ATOM	6300	OE1	GLU	C	30	-39.574	14.374	-12.969	1.00	39.82	8	C	O
ATOM	6301	OE2	GLU	C	30	-39.624	13.080	-11.219	1.00	39.93	8	C	O
ATOM	6302	N	ASP	C	31	-34.675	15.195	-10.205	1.00	27.24	7	C	N
ATOM	6303	CA	ASP	C	31	-33.669	15.692	-11.174	1.00	25.61	6	C	C
ATOM	6304	C	ASP	C	31	-33.002	14.512	-11.884	1.00	25.57	6	C	C
ATOM	6305	O	ASP	C	31	-32.630	14.502	-13.084	1.00	25.63	8	C	O
ATOM	6306	CB	ASP	C	31	-32.614	16.538	-10.487	1.00	25.06	6	C	C
ATOM	6307	CG	ASP	C	31	-33.086	17.831	-9.871	1.00	26.10	6	C	C
ATOM	6308	OD1	ASP	C	31	-33.930	18.496	-10.564	1.00	25.13	8	C	O
ATOM	6309	OD2	ASP	C	31	-32.614	18.205	-8.766	1.00	21.78	8	C	O
ATOM	6310	N	ILE	C	32	-32.855	13.429	-11.146	1.00	22.77	7	C	N
ATOM	6311	CA	ILE	C	32	-32.209	12.239	-11.709	1.00	23.20	6	C	C
ATOM	6312	C	ILE	C	32	-33.197	11.425	-12.540	1.00	24.54	6	C	C

81/188

ATOM	6313	O	ILE	C	32	-32.898	10.964	-13.638	1.00	21.43	8	C	O
ATOM	6314	CB	ILE	C	32	-31.676	11.371	-10.571	1.00	23.06	6	C	O
ATOM	6315	CG1AILE	C	32	-31.002	12.264	-9.510	0.50	22.45	6	C	C	O
ATOM	6316	CG1BILE	C	32	-30.658	12.178	-9.743	0.50	24.71	6	C	C	O
ATOM	6317	CG2AILE	C	32	-30.701	10.298	-11.026	0.50	22.38	6	C	C	O
ATOM	6318	CG2BILE	C	32	-31.003	10.115	-11.121	0.50	23.65	6	C	C	O
ATOM	6319	CD1AILE	C	32	-29.662	12.857	-9.868	0.50	19.21	6	C	C	O
ATOM	6320	CD1BILE	C	32	-30.259	11.309	-8.568	0.50	25.06	6	C	C	O
ATOM	6321	N	ASN	C	33	-34.374	11.221	-11.934	1.00	25.03	7	C	N
ATOM	6322	CA	ASN	C	33	-35.379	10.363	-12.564	1.00	26.80	6	C	C
ATOM	6323	C	ASN	C	33	-35.793	10.786	-13.956	1.00	26.67	6	C	C
ATOM	6324	O	ASN	C	33	-35.932	9.950	-14.853	1.00	27.27	8	C	O
ATOM	6325	CB	ASN	C	33	-36.619	10.286	-11.654	1.00	26.81	6	C	C
ATOM	6326	CG	ASN	C	33	-36.351	9.538	-10.371	1.00	26.28	6	C	C
ATOM	6327	OD1	ASN	C	33	-37.160	9.622	-9.422	1.00	28.36	8	C	O
ATOM	6328	ND2	ASN	C	33	-35.229	8.856	-10.269	1.00	23.70	7	C	N
ATOM	6329	N	GLU	C	34	-35.741	12.088	-14.194	1.00	28.57	7	C	N
ATOM	6330	CA	GLU	C	34	-36.165	12.566	-15.515	1.00	30.70	6	C	C
ATOM	6331	C	GLU	C	34	-35.241	11.979	-16.568	1.00	29.36	6	C	C
ATOM	6332	O	GLU	C	34	-35.709	11.490	-17.614	1.00	24.82	8	C	O
ATOM	6333	CB	GLU	C	34	-36.231	14.088	-15.545	1.00	37.87	6	C	C
ATOM	6334	CG	GLU	C	34	-36.303	14.679	-16.956	1.00	44.98	6	C	C
ATOM	6335	CD	GLU	C	34	-36.091	16.183	-16.990	1.00	50.17	6	C	C
ATOM	6336	OE1	GLU	C	34	-36.372	16.849	-15.958	1.00	52.69	8	C	O
ATOM	6337	OE2	GLU	C	34	-35.648	16.716	-18.042	1.00	52.90	8	C	O
ATOM	6338	N	ASP	C	35	-33.928	12.021	-16.280	1.00	26.27	7	C	N
ATOM	6339	CA	ASP	C	35	-32.955	11.479	-17.215	1.00	25.33	6	C	C
ATOM	6340	C	ASP	C	35	-32.981	9.969	-17.214	1.00	23.75	6	C	C
ATOM	6341	O	ASP	C	35	-32.729	9.394	-18.273	1.00	23.63	8	C	O
ATOM	6342	CB	ASP	C	35	-31.536	11.993	-16.901	1.00	27.00	6	C	C
ATOM	6343	CG	ASP	C	35	-31.363	13.441	-17.334	1.00	28.50	6	C	C
ATOM	6344	OD1	ASP	C	35	-32.265	13.918	-18.059	1.00	28.14	8	C	O
ATOM	6345	OD2	ASP	C	35	-30.329	14.046	-16.983	1.00	27.10	8	C	O
ATOM	6346	N	LEU	C	36	-33.241	9.302	-16.072	1.00	23.90	7	C	N
ATOM	6347	CA	LEU	C	36	-33.289	7.832	-16.140	1.00	22.70	6	C	C
ATOM	6348	C	LEU	C	36	-34.387	7.422	-17.133	1.00	24.28	6	C	C
ATOM	6349	O	LEU	C	36	-34.363	6.439	-17.876	1.00	24.03	8	C	O
ATOM	6350	CB	LEU	C	36	-33.572	7.235	-14.738	1.00	20.78	6	C	C
ATOM	6351	CG	LEU	C	36	-32.418	7.535	-13.748	1.00	20.70	6	C	C
ATOM	6352	CD1	LEU	C	36	-32.698	6.972	-12.369	1.00	21.84	6	C	C
ATOM	6353	CD2	LEU	C	36	-31.092	7.052	-14.302	1.00	17.55	6	C	C
ATOM	6354	N	ARG	C	37	-35.516	8.113	-17.043	1.00	25.37	7	C	N
ATOM	6355	CA	ARG	C	37	-36.662	7.835	-17.923	1.00	28.06	6	C	C
ATOM	6356	C	ARG	C	37	-36.289	8.004	-19.394	1.00	26.46	6	C	C
ATOM	6357	O	ARG	C	37	-36.596	7.150	-20.217	1.00	24.42	8	C	O
ATOM	6358	CB	ARG	C	37	-37.825	8.765	-17.595	1.00	31.77	6	C	C
ATOM	6359	CG	ARG	C	37	-38.532	8.523	-16.277	1.00	37.81	6	C	C
ATOM	6360	CD	ARG	C	37	-39.934	9.142	-16.358	1.00	42.68	6	C	C
ATOM	6361	NE	ARG	C	37	-39.893	10.602	-16.246	1.00	46.44	7	C	N
ATOM	6362	CZ	ARG	C	37	-39.674	11.301	-15.128	1.00	48.01	6	C	C
ATOM	6363	NH1	ARG	C	37	-39.678	12.630	-15.163	1.00	48.56	7	C	N
ATOM	6364	NH2	ARG	C	37	-39.462	10.687	-13.971	1.00	47.75	7	C	N
ATOM	6365	N	ARG	C	38	-35.604	9.069	-19.746	1.00	25.98	7	C	N
ATOM	6366	CA	ARG	C	38	-35.193	9.312	-21.117	1.00	26.77	6	C	C
ATOM	6367	C	ARG	C	38	-34.324	8.152	-21.584	1.00	28.17	6	C	C
ATOM	6368	O	ARG	C	38	-34.519	7.649	-22.710	1.00	26.00	8	C	O
ATOM	6369	CB	ARG	C	38	-34.498	10.667	-21.257	1.00	28.28	6	C	C
ATOM	6370	CG	ARG	C	38	-35.382	11.892	-20.992	1.00	31.14	6	C	C
ATOM	6371	CD	ARG	C	38	-34.578	13.184	-20.891	1.00	30.21	6	C	C
ATOM	6372	NE	ARG	C	38	-33.917	13.583	-22.128	1.00	33.03	7	C	N
ATOM	6373	CZ	ARG	C	38	-32.902	14.398	-22.368	1.00	32.68	6	C	C
ATOM	6374	NH1	ARG	C	38	-32.464	14.644	-23.606	1.00	33.34	7	C	N
ATOM	6375	NH2	ARG	C	38	-32.218	14.935	-21.366	1.00	32.29	7	C	N
ATOM	6376	N	ARG	C	39	-33.392	7.699	-20.719	1.00	25.15	7	C	N
ATOM	6377	CA	ARG	C	39	-32.460	6.657	-21.090	1.00	23.80	6	C	C
ATOM	6378	C	ARG	C	39	-33.133	5.350	-21.443	1.00	23.98	6	C	C
ATOM	6379	O	ARG	C	39	-32.627	4.513	-22.173	1.00	25.09	8	C	O
ATOM	6380	CB	ARG	C	39	-31.486	6.373	-19.898	1.00	22.36	6	C	C
ATOM	6381	CG	ARG	C	39	-30.223	5.629	-20.353	1.00	21.13	6	C	C
ATOM	6382	CD	ARG	C	39	-29.516	4.994	-19.109	1.00	21.69	6	C	C
ATOM	6383	NE	ARG	C	39	-30.474	3.983	-18.652	1.00	20.54	7	C	N
ATOM	6384	CZ	ARG	C	39	-30.520	2.751	-19.126	1.00	21.37	6	C	C
ATOM	6385	NH1	ARG	C	39	-29.633	2.309	-19.995	1.00	21.38	7	C	N
ATOM	6386	NH2	ARG	C	39	-31.433	1.880	-18.704	1.00	20.73	7	C	N
ATOM	6387	N	GLN	C	40	-34.302	5.117	-20.839	1.00	24.81	7	C	N
ATOM	6388	CA	GLN	C	40	-35.039	3.888	-21.056	1.00	26.17	6	C	C
ATOM	6389	C	GLN	C	40	-35.821	3.943	-22.372	1.00	27.90	6	C	C
ATOM	6390	O	GLN	C	40	-36.228	2.881	-22.833	1.00	29.23	8	C	O
ATOM	6391	CB	GLN	C	40	-36.030	3.667	-19.888	1.00	26.30	6	C	C

82/188

ATOM	6392	CG	GLN	C	40	-35.318	3.263	-18.590	1.00	25.17	6	C	C
ATOM	6393	CD	GLN	C	40	-36.322	2.648	-17.643	1.00	27.28	6	C	C
ATOM	6394	OE1	GLN	C	40	-36.787	3.234	-16.663	1.00	27.94	8	C	O
ATOM	6395	NE2	GLN	C	40	-36.699	1.404	-17.955	1.00	29.39	7	C	N
ATOM	6396	N	GLY	C	41	-36.051	5.125	-22.927	1.00	26.61	7	C	N
ATOM	6397	CA	GLY	C	41	-36.881	5.254	-24.109	1.00	28.45	6	C	C
ATOM	6398	C	GLY	C	41	-36.189	5.146	-25.455	1.00	29.06	6	C	C
ATOM	6399	O	GLY	C	41	-35.029	4.729	-25.598	1.00	28.86	8	C	O
ATOM	6400	N	GLY	C	42	-36.941	5.560	-26.493	1.00	27.06	7	C	N
ATOM	6401	CA	GLY	C	42	-36.450	5.495	-27.859	1.00	27.75	6	C	C
ATOM	6402	C	GLY	C	42	-37.122	4.334	-28.614	1.00	28.70	6	C	C
ATOM	6403	O	GLY	C	42	-37.056	3.172	-28.194	1.00	26.95	8	C	O
ATOM	6404	N	TYR	C	43	-37.752	4.657	-29.757	1.00	27.02	7	C	N
ATOM	6405	CA	TYR	C	43	-38.301	3.595	-30.597	1.00	26.57	6	C	C
ATOM	6406	C	TYR	C	43	-37.310	2.497	-30.924	1.00	26.52	6	C	C
ATOM	6407	O	TYR	C	43	-36.223	2.744	-31.439	1.00	25.55	8	C	O
ATOM	6408	CB	TYR	C	43	-38.831	4.167	-31.914	1.00	27.79	6	C	C
ATOM	6409	CG	TYR	C	43	-39.731	3.196	-32.668	1.00	31.86	6	C	C
ATOM	6410	CD1	TYR	C	43	-41.063	3.055	-32.243	1.00	33.11	6	C	C
ATOM	6411	CD2	TYR	C	43	-39.311	2.451	-33.742	1.00	31.60	6	C	C
ATOM	6412	CE1	TYR	C	43	-41.920	2.205	-32.921	1.00	33.72	6	C	C
ATOM	6413	CE2	TYR	C	43	-40.153	1.580	-34.415	1.00	32.25	6	C	C
ATOM	6414	CZ	TYR	C	43	-41.472	1.472	-33.997	1.00	33.62	6	C	C
ATOM	6415	OH	TYR	C	43	-42.348	0.614	-34.632	1.00	31.30	8	C	O
ATOM	6416	N	GLY	C	44	-37.679	1.216	-30.743	1.00	27.19	7	C	N
ATOM	6417	CA	GLY	C	44	-36.753	0.138	-31.057	1.00	29.65	6	C	C
ATOM	6418	C	GLY	C	44	-36.252	-0.603	-29.823	1.00	32.06	6	C	C
ATOM	6419	O	GLY	C	44	-35.708	-1.683	-29.973	1.00	33.39	8	C	O
ATOM	6420	N	ARG	C	45	-36.441	-0.072	-28.615	1.00	33.19	7	C	N
ATOM	6421	CA	ARG	C	45	-36.041	-0.771	-27.405	1.00	33.64	6	C	C
ATOM	6422	C	ARG	C	45	-37.270	-1.487	-26.821	1.00	36.91	6	C	C
ATOM	6423	O	ARG	C	45	-38.338	-0.864	-26.743	1.00	38.02	8	C	O
ATOM	6424	CB	ARG	C	45	-35.499	0.144	-26.307	1.00	32.80	6	C	C
ATOM	6425	CG	ARG	C	45	-34.347	1.041	-26.663	1.00	32.40	6	C	C
ATOM	6426	CD	ARG	C	45	-33.587	1.531	-25.429	1.00	32.17	6	C	C
ATOM	6427	NE	ARG	C	45	-32.716	0.481	-24.954	1.00	31.10	7	C	N
ATOM	6428	CZ	ARG	C	45	-31.986	0.458	-23.852	1.00	27.94	6	C	C
ATOM	6429	NH1	ARG	C	45	-32.038	1.470	-23.018	1.00	25.28	7	C	N
ATOM	6430	NH2	ARG	C	45	-31.254	-0.637	-23.635	1.00	27.25	7	C	N
ATOM	6431	N	GLY	C	46	-37.118	-2.742	-26.424	1.00	36.99	7	C	N
ATOM	6432	CA	GLY	C	46	-38.304	-3.410	-25.866	1.00	39.01	6	C	C
ATOM	6433	C	GLY	C	46	-37.885	-4.095	-24.567	1.00	40.01	6	C	C
ATOM	6434	O	GLY	C	46	-37.089	-3.554	-23.799	1.00	40.64	8	C	O
ATOM	6435	N	GLY	C	47	-38.382	-5.305	-24.391	1.00	38.28	7	C	N
ATOM	6436	CA	GLY	C	47	-38.016	-6.149	-23.285	1.00	38.10	6	C	C
ATOM	6437	C	GLY	C	47	-37.814	-5.474	-21.942	1.00	34.82	6	C	C
ATOM	6438	O	GLY	C	47	-38.761	-5.027	-21.288	1.00	34.29	8	C	O
ATOM	6439	N	ARG	C	48	-36.556	-5.457	-21.527	1.00	33.94	7	C	N
ATOM	6440	CA	ARG	C	48	-36.164	-5.013	-20.191	1.00	32.31	6	C	C
ATOM	6441	C	ARG	C	48	-36.704	-3.622	-19.917	1.00	32.38	6	C	C
ATOM	6442	O	ARG	C	48	-36.999	-3.273	-18.776	1.00	31.55	8	C	O
ATOM	6443	CB	ARG	C	48	-34.649	-5.107	-20.192	1.00	35.34	6	C	C
ATOM	6444	CG	ARG	C	48	-33.879	-5.008	-18.909	1.00	36.71	6	C	C
ATOM	6445	CD	ARG	C	48	-34.328	-5.966	-17.813	1.00	36.26	6	C	C
ATOM	6446	NE	ARG	C	48	-33.676	-5.649	-16.536	1.00	35.64	7	C	N
ATOM	6447	CZ	ARG	C	48	-32.366	-5.742	-16.289	1.00	34.19	6	C	C
ATOM	6448	NH1	ARG	C	48	-31.937	-5.394	-15.082	1.00	33.13	7	C	N
ATOM	6449	NH2	ARG	C	48	-31.495	-6.148	-17.196	1.00	33.85	7	C	N
ATOM	6450	N	MET	C	49	-36.791	-2.830	-21.006	1.00	31.35	7	C	N
ATOM	6451	CA	MET	C	49	-37.183	-1.430	-20.847	1.00	31.58	6	C	C
ATOM	6452	C	MET	C	49	-38.661	-1.325	-20.473	1.00	32.89	6	C	C
ATOM	6453	O	MET	C	49	-39.058	-0.208	-20.161	1.00	32.43	8	C	O
ATOM	6454	CB	MET	C	49	-36.893	-0.528	-22.038	1.00	31.00	6	C	C
ATOM	6455	CG	MET	C	49	-35.418	-0.417	-22.415	1.00	30.71	6	C	C
ATOM	6456	SE	MET	C	49	-34.403	0.117	-20.743	1.00	52.59	34	C	SE
ATOM	6457	CE2	MET	C	49	-33.870	-1.276	-19.676	1.00	18.17	6	C	C
ATOM	6458	N	GLY	C	50	-39.391	-2.428	-20.457	1.00	32.50	7	C	N
ATOM	6459	CA	GLY	C	50	-40.801	-2.285	-20.015	1.00	34.12	6	C	C
ATOM	6460	C	GLY	C	50	-40.873	-2.878	-18.610	1.00	35.32	6	C	C
ATOM	6461	O	GLY	C	50	-41.847	-2.641	-17.895	1.00	37.81	8	C	O
ATOM	6462	N	ILE	C	51	-39.885	-3.681	-18.243	1.00	33.75	7	C	N
ATOM	6463	CA	ILE	C	51	-39.847	-4.304	-16.928	1.00	34.22	6	C	C
ATOM	6464	C	ILE	C	51	-39.296	-3.293	-15.906	1.00	34.15	6	C	C
ATOM	6465	O	ILE	C	51	-39.906	-3.057	-14.855	1.00	33.62	8	C	O
ATOM	6466	CB	ILE	C	51	-38.982	-5.571	-16.968	1.00	35.52	6	C	C
ATOM	6467	CG1	ILE	C	51	-39.672	-6.695	-17.758	1.00	37.94	6	C	C
ATOM	6468	CG2	ILE	C	51	-38.622	-6.016	-15.568	1.00	35.59	6	C	C
ATOM	6469	CD1	ILE	C	51	-38.739	-7.778	-18.283	1.00	37.35	6	C	C
ATOM	6470	N	GLU	C	52	-38.164	-2.669	-16.222	1.00	30.03	7	C	N

83/188

ATOM	6471	CA	GLU	C	52	-37.547	-1.729	-15.303	1.00	30.20	6	C	C
ATOM	6472	C	GLU	C	52	-38.297	-0.405	-15.291	1.00	29.55	6	C	C
ATOM	6473	O	GLU	C	52	-38.720	0.086	-16.344	1.00	28.09	8	C	O
ATOM	6474	CB	GLU	C	52	-36.073	-1.488	-15.708	1.00	29.84	6	C	C
ATOM	6475	CG	GLU	C	52	-35.233	-2.747	-15.677	1.00	30.49	6	C	C
ATOM	6476	CD	GLU	C	52	-35.120	-3.465	-14.352	1.00	31.86	6	C	C
ATOM	6477	OE1	GLU	C	52	-34.575	-4.609	-14.305	1.00	32.23	8	C	O
ATOM	6478	OE2	GLU	C	52	-35.541	-2.923	-13.311	1.00	29.73	8	C	O
ATOM	6479	N	ASN	C	53	-38.322	0.226	-14.150	1.00	28.57	7	C	N
ATOM	6480	CA	ASN	C	53	-38.870	1.565	-13.957	1.00	31.32	6	C	C
ATOM	6481	C	ASN	C	53	-37.809	2.284	-13.120	1.00	29.37	6	C	C
ATOM	6482	O	ASN	C	53	-37.841	2.414	-11.909	1.00	27.60	8	C	O
ATOM	6483	CB	ASN	C	53	-40.233	1.546	-13.299	1.00	33.10	6	C	C
ATOM	6484	CG	ASN	C	53	-40.736	2.889	-12.848	1.00	36.79	6	C	C
ATOM	6485	OD1	ASN	C	53	-41.553	2.888	-11.907	1.00	39.22	8	C	O
ATOM	6486	ND2	ASN	C	53	-40.288	3.989	-13.446	1.00	36.83	7	C	N
ATOM	6487	N	ASP	C	54	-36.778	2.726	-13.827	1.00	27.00	7	C	N
ATOM	6488	CA	ASP	C	54	-35.579	3.221	-13.204	1.00	25.34	6	C	C
ATOM	6489	C	ASP	C	54	-35.787	4.500	-12.400	1.00	25.30	6	C	C
ATOM	6490	O	ASP	C	54	-36.077	5.545	-12.977	1.00	24.03	8	C	O
ATOM	6491	CB	ASP	C	54	-34.499	3.349	-14.284	1.00	25.44	6	C	C
ATOM	6492	CG	ASP	C	54	-33.889	2.094	-14.824	1.00	23.52	6	C	C
ATOM	6493	OD1	ASP	C	54	-33.985	1.013	-14.233	1.00	21.54	8	C	O
ATOM	6494	OD2	ASP	C	54	-33.222	2.152	-15.897	1.00	23.98	8	C	O
ATOM	6495	N	GLN	C	55	-35.623	4.419	-11.069	1.00	23.02	7	C	N
ATOM	6496	CA	GLN	C	55	-35.642	5.646	-10.281	1.00	25.68	6	C	C
ATOM	6497	C	GLN	C	55	-34.559	5.573	-9.189	1.00	24.88	6	C	C
ATOM	6498	O	GLN	C	55	-34.279	4.492	-8.691	1.00	22.92	8	C	O
ATOM	6499	CB	GLN	C	55	-36.944	6.052	-9.687	1.00	30.21	6	C	C
ATOM	6500	CG	GLN	C	55	-37.993	5.110	-9.220	1.00	35.87	6	C	C
ATOM	6501	CD	GLN	C	55	-39.404	5.709	-9.321	1.00	39.54	6	C	C
ATOM	6502	OE1	GLN	C	55	-39.754	6.541	-10.174	1.00	42.55	8	C	O
ATOM	6503	NE2	GLN	C	55	-40.272	5.296	-8.421	1.00	38.92	7	C	N
ATOM	6504	N	VAL	C	56	-34.089	6.764	-8.787	1.00	23.09	7	C	N
ATOM	6505	CA	VAL	C	56	-32.962	6.706	-7.833	1.00	24.48	6	C	C
ATOM	6506	C	VAL	C	56	-33.376	6.737	-6.377	1.00	24.91	6	C	C
ATOM	6507	O	VAL	C	56	-34.444	7.262	-6.052	1.00	24.74	8	C	O
ATOM	6508	CB	VAL	C	56	-32.036	7.870	-8.189	1.00	23.74	6	C	C
ATOM	6509	CG1	VAL	C	56	-32.689	9.203	-7.853	1.00	24.80	6	C	C
ATOM	6510	CG2	VAL	C	56	-30.664	7.721	-7.574	1.00	24.52	6	C	C
ATOM	6511	N	VAL	C	57	-32.518	6.234	-5.506	1.00	23.12	7	C	N
ATOM	6512	CA	VAL	C	57	-32.594	6.308	-4.075	1.00	21.49	6	C	C
ATOM	6513	C	VAL	C	57	-31.245	6.872	-3.562	1.00	23.56	6	C	C
ATOM	6514	O	VAL	C	57	-30.200	6.283	-3.846	1.00	19.05	8	C	O
ATOM	6515	CB	VAL	C	57	-32.843	4.949	-3.416	1.00	24.60	6	C	C
ATOM	6516	CG1	VAL	C	57	-32.893	5.082	-1.900	1.00	25.25	6	C	C
ATOM	6517	CG2	VAL	C	57	-34.196	4.349	-3.880	1.00	24.63	6	C	C
ATOM	6518	N	PHE	C	58	-31.298	8.067	-2.943	1.00	21.51	7	C	N
ATOM	6519	CA	PHE	C	58	-30.102	8.630	-2.347	1.00	21.65	6	C	C
ATOM	6520	C	PHE	C	58	-29.914	7.988	-0.961	1.00	20.40	6	C	C
ATOM	6521	O	PHE	C	58	-30.888	7.804	-0.221	1.00	18.44	8	C	O
ATOM	6522	CB	PHE	C	58	-30.174	10.134	-2.152	1.00	20.57	6	C	C
ATOM	6523	CG	PHE	C	58	-30.187	10.940	-3.435	1.00	21.36	6	C	C
ATOM	6524	CD1	PHE	C	58	-29.086	10.973	-4.274	1.00	20.39	6	C	C
ATOM	6525	CD2	PHE	C	58	-31.301	11.714	-3.733	1.00	21.17	6	C	C
ATOM	6526	CE1	PHE	C	58	-29.124	11.750	-5.414	1.00	23.16	6	C	C
ATOM	6527	CE2	PHE	C	58	-31.347	12.492	-4.869	1.00	22.50	6	C	C
ATOM	6528	CZ	PHE	C	58	-30.242	12.511	-5.725	1.00	23.34	6	C	C
ATOM	6529	N	THR	C	59	-28.664	7.785	-0.592	1.00	20.82	7	C	N
ATOM	6530	CA	THR	C	59	-28.394	7.171	0.750	1.00	19.69	6	C	C
ATOM	6531	C	THR	C	59	-27.259	7.890	1.415	1.00	20.15	6	C	C
ATOM	6532	O	THR	C	59	-26.903	7.640	2.568	1.00	19.59	8	C	O
ATOM	6533	CB	THR	C	59	-28.280	5.734	0.249	1.00	22.16	6	C	C
ATOM	6534	OG1	THR	C	59	-29.206	4.819	0.853	1.00	26.84	8	C	O
ATOM	6535	CG2	THR	C	59	-26.901	5.213	0.026	1.00	16.34	6	C	C
ATOM	6536	N	SER	C	60	-26.656	8.895	0.752	1.00	18.39	7	C	N
ATOM	6537	CA	SER	C	60	-25.668	9.726	1.380	1.00	17.23	6	C	C
ATOM	6538	C	SER	C	60	-25.484	11.017	0.557	1.00	19.32	6	C	C
ATOM	6539	O	SER	C	60	-25.731	11.121	-0.657	1.00	16.82	8	C	O
ATOM	6540	CB	SER	C	60	-24.301	9.037	1.523	1.00	19.10	6	C	C
ATOM	6541	OG	SER	C	60	-23.664	8.969	0.249	1.00	16.17	8	C	O
ATOM	6542	N	GLY	C	61	-24.900	11.988	1.228	1.00	19.88	7	C	N
ATOM	6543	CA	GLY	C	61	-24.494	13.277	0.690	1.00	18.86	6	C	C
ATOM	6544	C	GLY	C	61	-25.566	14.246	0.273	1.00	20.88	6	C	C
ATOM	6545	O	GLY	C	61	-25.229	15.325	-0.267	1.00	21.76	8	C	O
ATOM	6546	N	VAL	C	62	-26.840	13.906	0.457	1.00	21.09	7	C	N
ATOM	6547	CA	VAL	C	62	-27.921	14.840	0.050	1.00	19.39	6	C	C
ATOM	6548	C	VAL	C	62	-28.806	15.040	1.283	1.00	20.15	6	C	C
ATOM	6549	O	VAL	C	62	-29.248	14.025	1.834	1.00	19.10	8	C	O

84/188

ATOM	6550	CB	VAL	C	62	-28.735	14.281	-1.110	1.00	19.60	6	C	C
ATOM	6551	CG1	VAL	C	62	-29.834	15.262	-1.489	1.00	19.28	6	C	C
ATOM	6552	CG2	VAL	C	62	-27.855	13.997	-2.333	1.00	19.22	6	C	C
ATOM	6553	N	ARG	C	63	-29.104	16.266	1.661	1.00	18.47	7	C	N
ATOM	6554	CA	ARG	C	63	-29.889	16.508	2.873	1.00	20.65	6	C	C
ATOM	6555	C	ARG	C	63	-30.818	17.690	2.693	1.00	21.79	6	C	C
ATOM	6556	O	ARG	C	63	-30.341	18.727	2.267	1.00	20.10	8	C	O
ATOM	6557	CB	ARG	C	63	-28.970	16.874	4.054	1.00	20.93	6	C	C
ATOM	6558	CG	ARG	C	63	-29.763	16.959	5.361	1.00	21.40	6	C	C
ATOM	6559	CD	ARG	C	63	-28.846	17.230	6.549	1.00	21.23	6	C	C
ATOM	6560	NE	ARG	C	63	-29.694	17.563	7.696	1.00	22.38	7	C	N
ATOM	6561	C2	ARG	C	63	-29.467	18.445	8.654	1.00	23.06	6	C	C
ATOM	6562	NH1	ARG	C	63	-28.342	19.171	8.676	1.00	20.18	7	C	N
ATOM	6563	NH2	ARG	C	63	-30.442	18.533	9.564	1.00	20.32	7	C	N
ATOM	6564	N	HIS	C	64	-32.111	17.440	2.902	1.00	23.29	7	C	N
ATOM	6565	CA	HIS	C	64	-33.080	18.511	2.748	1.00	22.71	6	C	C
ATOM	6566	C	HIS	C	64	-33.066	19.170	1.405	1.00	23.55	6	C	C
ATOM	6567	O	HIS	C	64	-33.117	20.406	1.357	1.00	25.58	8	C	O
ATOM	6568	CB	HIS	C	64	-32.892	19.509	3.899	1.00	24.11	6	C	C
ATOM	6569	CG	HIS	C	64	-33.235	18.918	5.237	1.00	22.66	6	C	C
ATOM	6570	ND1	HIS	C	64	-32.807	19.428	6.437	1.00	23.33	7	C	N
ATOM	6571	CD2	HIS	C	64	-33.900	17.783	5.541	1.00	21.84	6	C	C
ATOM	6572	CE1	HIS	C	64	-33.261	18.693	7.435	1.00	24.81	6	C	C
ATOM	6573	NE2	HIS	C	64	-33.926	17.680	6.905	1.00	23.60	7	C	N
ATOM	6574	N	GLY	C	65	-32.902	18.386	0.348	1.00	23.17	7	C	N
ATOM	6575	CA	GLY	C	65	-32.881	18.931	-1.003	1.00	21.82	6	C	C
ATOM	6576	C	GLY	C	65	-31.605	19.554	-1.535	1.00	21.83	6	C	C
ATOM	6577	O	GLY	C	65	-31.600	20.100	-2.644	1.00	18.71	8	C	O
ATOM	6578	N	LYS	C	66	-30.488	19.429	-0.845	1.00	20.31	7	C	N
ATOM	6579	CA	LYS	C	66	-29.225	20.016	-1.223	1.00	21.65	6	C	C
ATOM	6580	C	LYS	C	66	-28.036	19.117	-0.917	1.00	19.17	6	C	C
ATOM	6581	O	LYS	C	66	-28.127	18.325	0.028	1.00	18.85	8	C	O
ATOM	6582	CB	LYS	C	66	-28.915	21.309	-0.436	1.00	23.01	6	C	C
ATOM	6583	CG	LYS	C	66	-29.724	22.506	-0.905	1.00	28.01	6	C	C
ATOM	6584	CD	LYS	C	66	-29.227	23.798	-0.212	1.00	30.11	6	C	C
ATOM	6585	CE	LYS	C	66	-29.970	24.905	-0.979	1.00	32.21	6	C	C
ATOM	6586	N2	LYS	C	66	-30.028	26.176	-0.231	1.00	34.38	7	C	N
ATOM	6587	N	THR	C	67	-26.975	19.254	-1.752	1.00	17.83	7	C	N
ATOM	6588	CA	THR	C	67	-25.804	18.416	-1.432	1.00	18.95	6	C	C
ATOM	6589	C	THR	C	67	-25.106	19.006	-0.213	1.00	19.60	6	C	C
ATOM	6590	O	THR	C	67	-25.268	20.223	0.008	1.00	18.10	8	C	O
ATOM	6591	CB	THR	C	67	-24.784	18.400	-2.579	1.00	16.77	6	C	C
ATOM	6592	OG1	THR	C	67	-24.445	19.778	-2.865	1.00	18.60	8	C	O
ATOM	6593	CG2	THR	C	67	-25.423	17.751	-3.786	1.00	16.09	6	C	C
ATOM	6594	N	THR	C	68	-24.257	18.194	0.421	1.00	18.94	7	C	N
ATOM	6595	CA	THR	C	68	-23.547	18.665	1.595	1.00	18.79	6	C	C
ATOM	6596	C	THR	C	68	-22.035	18.716	1.310	1.00	20.36	6	C	C
ATOM	6597	O	THR	C	68	-21.318	19.256	2.134	1.00	20.21	8	C	O
ATOM	6598	CB	THR	C	68	-23.734	17.699	2.786	1.00	21.08	6	C	C
ATOM	6599	OG1	THR	C	68	-23.182	16.421	2.405	1.00	18.79	8	C	O
ATOM	6600	CG2	THR	C	68	-25.236	17.648	3.179	1.00	17.80	6	C	C
ATOM	6601	N	GLY	C	69	-21.619	18.184	0.158	1.00	18.57	7	C	N
ATOM	6602	CA	GLY	C	69	-20.153	18.148	-0.073	1.00	17.87	6	C	C
ATOM	6603	C	GLY	C	69	-19.623	16.752	0.229	1.00	18.94	6	C	C
ATOM	6604	O	GLY	C	69	-18.527	16.380	-0.203	1.00	18.67	8	C	O
ATOM	6605	N	ALA	C	70	-20.341	15.972	1.029	1.00	18.89	7	C	N
ATOM	6606	CA	ALA	C	70	-19.879	14.600	1.322	1.00	18.92	6	C	C
ATOM	6607	C	ALA	C	70	-20.131	13.744	0.083	1.00	18.65	6	C	C
ATOM	6608	O	ALA	C	70	-20.897	14.129	-0.798	1.00	19.68	8	C	O
ATOM	6609	CB	ALA	C	70	-20.680	14.025	2.487	1.00	17.69	6	C	C
ATOM	6610	N	PRO	C	71	-19.622	12.526	0.016	1.00	16.94	7	C	N
ATOM	6611	CA	PRO	C	71	-19.908	11.634	-1.074	1.00	17.26	6	C	C
ATOM	6612	C	PRO	C	71	-21.405	11.388	-1.231	1.00	18.25	6	C	C
ATOM	6613	O	PRO	C	71	-22.101	11.112	-0.236	1.00	17.35	8	C	O
ATOM	6614	CB	PRO	C	71	-19.167	10.348	-0.733	1.00	16.62	6	C	C
ATOM	6615	CG	PRO	C	71	-18.127	10.782	0.267	1.00	15.81	6	C	C
ATOM	6616	CD	PRO	C	71	-18.704	11.942	1.014	1.00	17.13	6	C	C
ATOM	6617	N	ILE	C	72	-21.820	11.415	-2.487	1.00	16.97	7	C	N
ATOM	6618	CA	ILE	C	72	-23.229	11.122	-2.805	1.00	17.84	6	C	C
ATOM	6619	C	ILE	C	72	-23.359	9.692	-3.281	1.00	18.15	6	C	C
ATOM	6620	O	ILE	C	72	-22.614	9.306	-4.199	1.00	19.67	8	C	O
ATOM	6621	CB	ILE	C	72	-23.680	12.060	-3.958	1.00	17.91	6	C	C
ATOM	6622	CG1	ILE	C	72	-23.653	13.491	-3.361	1.00	18.52	6	C	C
ATOM	6623	CG2	ILE	C	72	-25.021	11.638	-4.496	1.00	16.87	6	C	C
ATOM	6624	CD1	ILE	C	72	-23.716	14.586	-4.380	1.00	18.13	6	C	C
ATOM	6625	N	THR	C	73	-24.285	8.956	-2.720	1.00	19.88	7	C	N
ATOM	6626	CA	THR	C	73	-24.534	7.579	-3.104	1.00	17.69	6	C	C
ATOM	6627	C	THR	C	73	-25.939	7.487	-3.719	1.00	20.60	6	C	C
ATOM	6628	O	THR	C	73	-26.916	7.954	-3.090	1.00	19.01	8	C	O

85/188

ATOM	6629	CB	THR	C	73	-24.422	6.573	-1.966	1.00	16.38	6	C	C
ATOM	6630	OG1	THR	C	73	-23.141	6.702	-1.337	1.00	18.37	8	C	O
ATOM	6631	CG2	THR	C	73	-24.569	5.101	-2.408	1.00	13.91	6	C	C
ATOM	6632	N	MET	C	74	-25.979	6.891	-4.880	1.00	17.52	7	C	N
ATOM	6633	CA	MET	C	74	-27.243	6.649	-5.579	1.00	19.14	6	C	C
ATOM	6634	C	MET	C	74	-27.399	5.158	-5.896	1.00	20.05	6	C	C
ATOM	6635	O	MET	C	74	-26.449	4.528	-6.319	1.00	17.79	8	C	O
ATOM	6636	CB	MET	C	74	-27.298	7.409	-6.908	1.00	16.38	6	C	C
ATOM	6637	CG	MET	C	74	-27.266	8.903	-6.615	1.00	14.86	6	C	C
ATOM	6638	SE	MET	C	74	-27.332	9.923	-8.293	1.00	38.03	34	C	SE
ATOM	6639	CE2	MET	C	74	-25.572	9.233	-8.987	1.00	17.52	6	C	C
ATOM	6640	N	ASP	C	75	-28.597	4.614	-5.697	1.00	22.43	7	C	N
ATOM	6641	CA	ASP	C	75	-28.966	3.249	-5.993	1.00	23.18	6	C	C
ATOM	6642	C	ASP	C	75	-30.113	3.274	-7.035	1.00	22.03	6	C	C
ATOM	6643	O	ASP	C	75	-30.934	4.175	-7.018	1.00	19.51	8	C	O
ATOM	6644	CB	ASP	C	75	-29.698	2.534	-4.846	1.00	25.78	6	C	C
ATOM	6645	CG	ASP	C	75	-28.871	2.299	-3.623	1.00	26.68	6	C	C
ATOM	6646	OD1	ASP	C	75	-27.649	2.520	-3.701	1.00	25.55	8	C	O
ATOM	6647	OD2	ASP	C	75	-29.431	1.887	-2.581	1.00	26.51	8	C	O
ATOM	6648	N	VAL	C	76	-30.128	2.279	-7.893	1.00	20.94	7	C	N
ATOM	6649	CA	VAL	C	76	-31.169	1.992	-8.833	1.00	20.62	6	C	C
ATOM	6650	C	VAL	C	76	-31.315	0.459	-8.804	1.00	21.35	6	C	C
ATOM	6651	O	VAL	C	76	-30.417	-0.300	-9.213	1.00	18.34	8	C	O
ATOM	6652	CB	VAL	C	76	-30.961	2.423	-10.284	1.00	19.23	6	C	C
ATOM	6653	CG1	VAL	C	76	-32.143	1.973	-11.168	1.00	20.42	6	C	C
ATOM	6654	CG2	VAL	C	76	-30.825	3.916	-10.381	1.00	20.71	6	C	C
ATOM	6655	N	ILE	C	77	-32.455	0.053	-8.294	1.00	21.55	7	C	N
ATOM	6656	CA	ILE	C	77	-32.750	-1.376	-8.188	1.00	23.44	6	C	C
ATOM	6657	C	ILE	C	77	-32.975	-2.058	-9.528	1.00	24.07	6	C	C
ATOM	6658	O	ILE	C	77	-33.382	-1.436	-10.523	1.00	25.74	8	C	O
ATOM	6659	CB	ILE	C	77	-34.051	-1.511	-7.329	1.00	24.98	6	C	C
ATOM	6660	CG1AILE	C	77	-34.097	-2.947	-6.825	0.50	25.47	6	C	C	
ATOM	6661	CG1BILE	C	77	-33.826	-1.056	-5.900	0.50	25.62	6	C	C	
ATOM	6662	CG2AILE	C	77	-35.297	-1.129	-8.098	0.50	23.16	6	C	C	
ATOM	6663	CG2BILE	C	77	-34.623	-2.912	-7.403	0.50	25.03	6	C	C	
ATOM	6664	CD1AILE	C	77	-35.246	-3.342	-5.942	0.50	25.93	6	C	C	
ATOM	6665	CD1BILE	C	77	-32.853	-1.894	-5.101	0.50	25.46	6	C	C	
ATOM	6666	N	ASN	C	78	-32.679	-3.363	-9.621	1.00	22.12	7	C	N
ATOM	6667	CA	ASN	C	78	-32.966	-4.135	-10.805	1.00	24.99	6	C	C
ATOM	6668	C	ASN	C	78	-34.201	-4.984	-10.482	1.00	26.72	6	C	C
ATOM	6669	O	ASN	C	78	-34.071	-6.015	-9.830	1.00	25.84	8	C	O
ATOM	6670	CB	ASN	C	78	-31.854	-5.097	-11.234	1.00	23.24	6	C	C
ATOM	6671	CG	ASN	C	78	-30.609	-4.385	-11.734	1.00	24.80	6	C	C
ATOM	6672	OD1	ASN	C	78	-30.732	-3.438	-12.517	1.00	23.32	8	C	O
ATOM	6673	ND2	ASN	C	78	-29.432	-4.848	-11.329	1.00	24.09	7	C	N
ATOM	6674	N	LYS	C	79	-35.361	-4.561	-10.944	1.00	30.75	7	C	N
ATOM	6675	CA	LYS	C	79	-36.572	-5.353	-10.723	1.00	35.36	6	C	C
ATOM	6676	C	LYS	C	79	-36.393	-6.751	-11.287	1.00	36.41	6	C	C
ATOM	6677	O	LYS	C	79	-36.781	-7.742	-10.641	1.00	39.41	8	C	O
ATOM	6678	CB	LYS	C	79	-37.754	-4.577	-11.309	1.00	38.59	6	C	C
ATOM	6679	CG	LYS	C	79	-38.192	-3.435	-10.396	1.00	42.29	6	C	C
ATOM	6680	CD	LYS	C	79	-39.632	-3.017	-10.710	1.00	45.33	6	C	C
ATOM	6681	CE	LYS	C	79	-39.822	-1.519	-10.434	1.00	46.61	6	C	C
ATOM	6682	NZ	LYS	C	79	-40.832	-1.014	-11.438	1.00	49.40	7	C	N
ATOM	6683	N	ASP	C	80	-35.726	-6.910	-12.408	1.00	35.96	7	C	N
ATOM	6684	CA	ASP	C	80	-35.461	-8.204	-13.025	1.00	37.13	6	C	C
ATOM	6685	C	ASP	C	80	-34.725	-9.236	-12.187	1.00	36.34	6	C	C
ATOM	6686	O	ASP	C	80	-34.728	-10.417	-12.559	1.00	35.12	8	C	O
ATOM	6687	CB	ASP	C	80	-34.645	-7.942	-14.323	1.00	37.18	6	C	C
ATOM	6688	CG	ASP	C	80	-34.902	-9.023	-15.362	1.00	38.57	6	C	C
ATOM	6689	OD1	ASP	C	80	-34.012	-9.365	-16.166	1.00	37.13	8	C	O
ATOM	6690	OD2	ASP	C	80	-36.036	-9.558	-15.371	1.00	38.49	8	C	O
ATOM	6691	N	HIS	C	81	-34.030	-8.833	-11.118	1.00	34.88	7	C	N
ATOM	6692	CA	HIS	C	81	-33.198	-9.700	-10.309	1.00	33.39	6	C	C
ATOM	6693	C	HIS	C	81	-33.965	-10.855	-9.651	1.00	35.12	6	C	C
ATOM	6694	O	HIS	C	81	-33.437	-11.915	-9.295	1.00	31.43	8	C	O
ATOM	6695	CB	HIS	C	81	-32.451	-8.897	-9.225	1.00	29.30	6	C	C
ATOM	6696	CG	HIS	C	81	-31.527	-9.721	-8.389	1.00	27.12	6	C	C
ATOM	6697	ND1	HIS	C	81	-30.417	-10.348	-8.912	1.00	26.36	7	C	N
ATOM	6698	CD2	HIS	C	81	-31.541	-10.051	-7.078	1.00	26.65	6	C	C
ATOM	6699	CE1	HIS	C	81	-29.793	-11.037	-7.975	1.00	26.98	6	C	C
ATOM	6700	NE2	HIS	C	81	-30.460	-10.866	-6.856	1.00	27.43	7	C	N
ATOM	6701	N	GLN	C	82	-35.251	-10.589	-9.461	1.00	36.89	7	C	N
ATOM	6702	CA	GLN	C	82	-36.149	-11.565	-8.877	1.00	40.72	6	C	C
ATOM	6703	C	GLN	C	82	-36.145	-12.842	-9.714	1.00	40.72	6	C	C
ATOM	6704	O	GLN	C	82	-36.390	-13.938	-9.212	1.00	40.11	8	C	O
ATOM	6705	CB	GLN	C	82	-37.544	-10.933	-8.725	1.00	42.40	6	C	C
ATOM	6706	CG	GLN	C	82	-37.608	-9.766	-7.735	1.00	46.23	6	C	C
ATOM	6707	CD	GLN	C	82	-36.741	-9.992	-6.506	1.00	48.62	6	C	C

ATOM	6708	OE1	GLN	C	82	-35.672	-9.390	-6.285	1.00	50.42	8	C	O
ATOM	6709	NE2	GLN	C	82	-37.142	-10.979	-5.713	1.00	48.23	7	C	N
ATOM	6710	N	LYS	C	83	-35.812	-12.709	-10.987	1.00	41.48	7	C	N
ATOM	6711	CA	LYS	C	83	-35.790	-13.873	-11.880	1.00	42.77	6	C	C
ATOM	6712	C	LYS	C	83	-34.403	-14.506	-11.933	1.00	42.59	6	C	C
ATOM	6713	O	LYS	C	83	-34.185	-15.443	-12.705	1.00	43.66	8	C	O
ATOM	6714	CB	LYS	C	83	-36.215	-13.444	-13.284	1.00	44.99	6	C	C
ATOM	6715	CG	LYS	C	83	-37.564	-12.741	-13.392	1.00	48.87	6	C	C
ATOM	6716	CD	LYS	C	83	-38.726	-13.665	-13.049	1.00	50.38	6	C	C
ATOM	6717	CE	LYS	C	83	-40.061	-12.944	-12.969	1.00	51.31	6	C	C
ATOM	6718	NZ	LYS	C	83	-40.704	-12.747	-14.296	1.00	51.26	7	C	N
ATOM	6719	N	TRP	C	84	-33.466	-14.033	-11.109	1.00	38.52	7	C	N
ATOM	6720	CA	TRP	C	84	-32.085	-14.466	-11.132	1.00	35.83	6	C	C
ATOM	6721	C	TRP	C	84	-31.471	-14.637	-9.752	1.00	33.80	6	C	C
ATOM	6722	O	TRP	C	84	-30.236	-14.597	-9.605	1.00	32.01	8	C	O
ATOM	6723	CB	TRP	C	84	-31.224	-13.384	-11.845	1.00	34.71	6	C	C
ATOM	6724	CG	TRP	C	84	-31.593	-13.087	-13.259	1.00	33.07	6	C	C
ATOM	6725	CD1	TRP	C	84	-32.610	-12.294	-13.704	1.00	32.88	6	C	C
ATOM	6726	CD2	TRP	C	84	-30.929	-13.566	-14.445	1.00	31.79	6	C	C
ATOM	6727	NE1	TRP	C	84	-32.613	-12.245	-15.074	1.00	31.92	7	C	N
ATOM	6728	CE2	TRP	C	84	-31.605	-13.032	-15.555	1.00	30.69	6	C	C
ATOM	6729	CE3	TRP	C	84	-29.827	-14.391	-14.672	1.00	30.43	6	C	C
ATOM	6730	CZ2	TRP	C	84	-31.219	-13.300	-16.860	1.00	30.49	6	C	C
ATOM	6731	CZ3	TRP	C	84	-29.437	-14.659	-15.974	1.00	30.10	6	C	C
ATOM	6732	CH2	TRP	C	84	-30.141	-14.121	-17.064	1.00	30.14	6	C	C
ATOM	6733	N	LEU	C	85	-32.284	-14.835	-8.720	1.00	33.35	7	C	N
ATOM	6734	CA	LEU	C	85	-31.803	-14.930	-7.359	1.00	31.54	6	C	C
ATOM	6735	C	LEU	C	85	-30.758	-15.997	-7.103	1.00	31.94	6	C	C
ATOM	6736	O	LEU	C	85	-29.890	-15.918	-6.231	1.00	31.59	8	C	O
ATOM	6737	CB	LEU	C	85	-33.001	-15.263	-6.433	1.00	34.56	6	C	C
ATOM	6738	CG	LEU	C	85	-34.068	-14.169	-6.413	1.00	35.25	6	C	C
ATOM	6739	CD1	LEU	C	85	-35.252	-14.562	-5.536	1.00	35.98	6	C	C
ATOM	6740	CD2	LEU	C	85	-33.451	-12.838	-6.021	1.00	36.30	6	C	C
ATOM	6741	N	ASP	C	86	-30.835	-17.073	-7.885	1.00	31.12	7	C	N
ATOM	6742	CA	ASP	C	86	-29.941	-18.207	-7.742	1.00	31.12	6	C	C
ATOM	6743	C	ASP	C	86	-28.697	-18.000	-8.596	1.00	27.48	6	C	C
ATOM	6744	O	ASP	C	86	-27.570	-17.947	-8.106	1.00	26.42	8	C	O
ATOM	6745	CB	ASP	C	86	-30.667	-19.514	-8.077	1.00	34.01	6	C	C
ATOM	6746	CG	ASP	C	86	-31.367	-19.522	-9.423	1.00	37.38	6	C	C
ATOM	6747	OD1	ASP	C	86	-31.642	-18.459	-10.058	1.00	36.67	8	C	O
ATOM	6748	OD2	ASP	C	86	-31.670	-20.681	-9.838	1.00	40.34	8	C	O
ATOM	6749	N	ILE	C	87	-28.889	-17.720	-9.850	1.00	27.81	7	C	N
ATOM	6750	CA	ILE	C	87	-27.849	-17.522	-10.840	1.00	28.47	6	C	C
ATOM	6751	C	ILE	C	87	-26.877	-16.411	-10.437	1.00	29.14	6	C	C
ATOM	6752	O	ILE	C	87	-25.669	-16.563	-10.586	1.00	29.46	8	C	O
ATOM	6753	CB	ILE	C	87	-28.486	-17.227	-12.202	1.00	28.41	6	C	C
ATOM	6754	CG1	ILE	C	87	-29.360	-18.440	-12.588	1.00	30.39	6	C	C
ATOM	6755	CG2	ILE	C	87	-27.458	-16.907	-13.271	1.00	27.60	6	C	C
ATOM	6756	CD1	ILE	C	87	-30.329	-18.229	-13.713	1.00	29.38	6	C	C
ATOM	6757	N	MET	C	88	-27.393	-15.317	-9.926	1.00	28.74	7	C	N
ATOM	6758	CA	MET	C	88	-26.616	-14.141	-9.577	1.00	29.67	6	C	C
ATOM	6759	C	MET	C	88	-26.378	-13.935	-8.097	1.00	29.82	6	C	C
ATOM	6760	O	MET	C	88	-25.818	-12.916	-7.664	1.00	30.99	8	C	O
ATOM	6761	CB	MET	C	88	-27.293	-12.898	-10.133	1.00	28.37	6	C	C
ATOM	6762	CG	MET	C	88	-27.433	-12.790	-11.604	1.00	28.19	6	C	C
ATOM	6763	SE	MET	C	88	-25.465	-13.015	-12.396	1.00	43.26	34	C	SE
ATOM	6764	CE2	MET	C	88	-25.023	-10.929	-11.629	1.00	28.85	6	C	C
ATOM	6765	N	SER	C	89	-26.614	-14.951	-7.297	1.00	30.29	7	C	N
ATOM	6766	CA	SER	C	89	-26.362	-14.945	-5.870	1.00	28.32	6	C	C
ATOM	6767	C	SER	C	89	-24.903	-14.600	-5.557	1.00	29.05	6	C	C
ATOM	6768	O	SER	C	89	-23.987	-15.206	-6.140	1.00	23.96	8	C	O
ATOM	6769	CB	SER	C	89	-26.662	-16.317	-5.254	1.00	29.83	6	C	C
ATOM	6770	OG	SER	C	89	-26.269	-16.344	-3.875	1.00	31.76	8	C	O
ATOM	6771	N	ALA	C	90	-24.731	-13.682	-4.593	1.00	28.47	7	C	N
ATOM	6772	CA	ALA	C	90	-23.363	-13.405	-4.122	1.00	28.24	6	C	C
ATOM	6773	C	ALA	C	90	-22.707	-14.604	-3.464	1.00	28.93	6	C	C
ATOM	6774	O	ALA	C	90	-21.482	-14.852	-3.471	1.00	26.80	8	C	O
ATOM	6775	CB	ALA	C	90	-23.392	-12.292	-3.064	1.00	27.92	6	C	C
ATOM	6776	N	GLU	C	91	-23.520	-15.367	-2.713	1.00	30.30	7	C	N
ATOM	6777	CA	GLU	C	91	-22.928	-16.508	-2.010	1.00	33.13	6	C	C
ATOM	6778	C	GLU	C	91	-23.004	-17.801	-2.797	1.00	30.73	6	C	C
ATOM	6779	O	GLU	C	91	-23.740	-17.878	-3.751	1.00	28.93	8	C	O
ATOM	6780	CB	GLU	C	91	-23.525	-16.715	-0.636	1.00	36.58	6	C	C
ATOM	6781	CG	AGLU	C	91	-25.008	-17.016	-0.639	0.50	37.82	6	C	C
ATOM	6782	CG	BGLU	C	91	-25.041	-16.765	-0.647	0.50	38.32	6	C	C
ATOM	6783	CD	AGLU	C	91	-25.580	-16.551	0.701	0.50	40.00	6	C	C
ATOM	6784	CD	BGLU	C	91	-25.630	-15.497	-0.051	0.50	40.27	6	C	C
ATOM	6785	OE1	AGLU	C	91	-25.092	-15.503	1.191	0.50	41.39	8	C	O
ATOM	6786	OE1	BGLU	C	91	-24.851	-14.581	0.274	0.50	40.39	8	C	O

87/188

ATOM	6787	OE2AGLU	C	91	-26.476	-17.255	1.193	0.50	38.31	8	C	O	
ATOM	6788	OE2BGLU	C	91	-26.869	-15.451	0.127	0.50	41.05	8	C	O	
ATOM	6789	N	ASP	C	92	-22.200	-18.778	-2.444	1.00	32.48	7	C	N
ATOM	6790	CA	ASP	C	92	-22.099	-20.024	-3.189	1.00	36.82	6	C	C
ATOM	6791	C	ASP	C	92	-23.412	-20.820	-3.146	1.00	38.84	6	C	C
ATOM	6792	O	ASP	C	92	-24.101	-20.762	-2.119	1.00	37.35	8	C	O
ATOM	6793	CB	ASP	C	92	-20.969	-20.908	-2.626	1.00	37.33	6	C	C
ATOM	6794	CG	ASP	C	92	-20.434	-21.912	-3.623	1.00	36.80	6	C	C
ATOM	6795	OD1	ASP	C	92	-20.841	-21.967	-4.798	1.00	35.99	8	C	O
ATOM	6796	OD2	ASP	C	92	-19.544	-22.691	-3.233	1.00	37.74	8	C	O
ATOM	6797	N	ILE	C	93	-23.735	-21.464	-4.250	1.00	40.03	7	C	N
ATOM	6798	CA	ILE	C	93	-24.899	-22.310	-4.361	1.00	44.74	6	C	C
ATOM	6799	C	ILE	C	93	-24.454	-23.729	-4.754	1.00	48.40	6	C	C
ATOM	6800	O	ILE	C	93	-23.267	-24.020	-4.871	1.00	46.46	8	C	O
ATOM	6801	CB	ILE	C	93	-25.962	-21.844	-5.360	1.00	44.01	6	C	C
ATOM	6802	CG1	ILE	C	93	-25.401	-21.810	-6.780	1.00	42.05	6	C	C
ATOM	6803	CG2	ILE	C	93	-26.534	-20.493	-4.931	1.00	44.42	6	C	C
ATOM	6804	CD1	ILE	C	93	-26.348	-21.324	-7.849	1.00	42.46	6	C	C
ATOM	6805	N	GLU	C	94	-25.415	-24.628	-4.914	1.00	53.67	7	C	N
ATOM	6806	CA	GLU	C	94	-25.096	-26.013	-5.280	1.00	60.20	6	C	C
ATOM	6807	C	GLU	C	94	-24.487	-26.096	-6.674	1.00	62.09	6	C	C
ATOM	6808	O	GLU	C	94	-25.083	-25.536	-7.595	1.00	60.94	8	C	O
ATOM	6809	CB	GLU	C	94	-26.379	-26.845	-5.289	1.00	62.24	6	C	C
ATOM	6810	CG	GLU	C	94	-27.330	-26.562	-4.150	1.00	65.24	6	C	C
ATOM	6811	CD	GLU	C	94	-27.150	-27.460	-2.943	1.00	67.75	6	C	C
ATOM	6812	OE1	GLU	C	94	-26.069	-27.461	-2.310	1.00	68.30	8	C	O
ATOM	6813	OE2	GLU	C	94	-28.146	-28.169	-2.650	1.00	68.72	8	C	O
ATOM	6814	N	ASP	C	95	-23.378	-26.787	-6.837	1.00	65.73	7	C	N
ATOM	6815	CA	ASP	C	95	-22.730	-26.914	-8.136	1.00	69.15	6	C	C
ATOM	6816	C	ASP	C	95	-23.681	-27.220	-9.275	1.00	70.77	6	C	C
ATOM	6817	O	ASP	C	95	-23.567	-26.742	-10.403	1.00	70.82	8	C	O
ATOM	6818	CB	ASP	C	95	-21.682	-28.037	-8.008	1.00	70.30	6	C	C
ATOM	6819	CG	ASP	C	95	-20.571	-27.562	-7.082	1.00	70.93	6	C	C
ATOM	6820	OD1	ASP	C	95	-20.250	-26.358	-7.190	1.00	71.66	8	C	O
ATOM	6821	OD2	ASP	C	95	-20.046	-28.333	-6.266	1.00	71.14	8	C	O
ATOM	6822	N	ARG	C	96	-24.628	-28.092	-8.982	1.00	72.23	7	C	N
ATOM	6823	CA	ARG	C	96	-25.610	-28.581	-9.926	1.00	74.25	6	C	C
ATOM	6824	C	ARG	C	96	-26.486	-27.472	-10.494	1.00	72.98	6	C	C
ATOM	6825	O	ARG	C	96	-27.205	-27.689	-11.471	1.00	72.24	8	C	O
ATOM	6826	CB	ARG	C	96	-26.540	-29.577	-9.211	1.00	77.34	6	C	C
ATOM	6827	CG	ARG	C	96	-25.832	-30.410	-8.169	1.00	80.45	6	C	C
ATOM	6828	CD	ARG	C	96	-26.724	-31.011	-7.114	1.00	83.07	6	C	C
ATOM	6829	NE	ARG	C	96	-27.609	-30.084	-6.423	1.00	84.64	7	C	N
ATOM	6830	CZ	ARG	C	96	-28.926	-30.044	-6.605	1.00	85.43	6	C	C
ATOM	6831	NH1	ARG	C	96	-29.519	-30.876	-7.453	1.00	85.63	7	C	N
ATOM	6832	NH2	ARG	C	96	-29.658	-29.169	-5.926	1.00	85.81	7	C	N
ATOM	6833	N	LEU	C	97	-26.516	-26.333	-9.810	1.00	70.96	7	C	N
ATOM	6834	CA	LEU	C	97	-27.367	-25.227	-10.230	1.00	69.03	6	C	C
ATOM	6835	C	LEU	C	97	-26.578	-24.177	-11.005	1.00	66.71	6	C	C
ATOM	6836	O	LEU	C	97	-27.154	-23.336	-11.702	1.00	64.96	8	C	O
ATOM	6837	CB	LEU	C	97	-28.119	-24.572	-9.071	1.00	70.17	6	C	C
ATOM	6838	CG	LEU	C	97	-28.851	-25.487	-8.058	1.00	71.33	6	C	C
ATOM	6839	CD1	LEU	C	97	-29.541	-24.569	-7.010	1.00	71.50	6	C	C
ATOM	6840	CD2	LEU	C	97	-30.000	-26.235	-8.789	1.00	71.79	6	C	C
ATOM	6841	N	LYS	C	98	-25.249	-24.231	-10.917	1.00	63.40	7	C	N
ATOM	6842	CA	LYS	C	98	-24.381	-23.251	-11.547	1.00	61.20	6	C	C
ATOM	6843	C	LYS	C	98	-24.368	-23.218	-13.063	1.00	59.63	6	C	C
ATOM	6844	O	LYS	C	98	-24.059	-22.163	-13.640	1.00	59.34	8	C	O
ATOM	6845	CB	LYS	C	98	-22.953	-23.416	-11.013	1.00	60.32	6	C	C
ATOM	6846	CG	LYS	C	98	-22.798	-23.016	-9.558	1.00	59.68	6	C	C
ATOM	6847	CD	LYS	C	98	-21.372	-23.247	-9.078	1.00	59.36	6	C	C
ATOM	6848	CE	LYS	C	98	-21.239	-23.013	-7.588	1.00	59.08	6	C	C
ATOM	6849	NZ	LYS	C	98	-19.877	-23.384	-7.101	1.00	59.74	7	C	N
ATOM	6850	N	SER	C	99	-24.752	-24.283	-13.751	1.00	57.47	7	C	N
ATOM	6851	CA	SER	C	99	-24.753	-24.263	-15.213	1.00	55.84	6	C	C
ATOM	6852	C	SER	C	99	-25.887	-23.441	-15.811	1.00	54.59	6	C	C
ATOM	6853	O	SER	C	99	-25.940	-23.168	-17.015	1.00	52.90	8	C	O
ATOM	6854	CB	SER	C	99	-24.843	-25.699	-15.744	1.00	55.70	6	C	C
ATOM	6855	OG	SER	C	99	-26.187	-26.141	-15.748	1.00	53.63	8	C	O
ATOM	6856	N	LYS	C	100	-26.873	-23.061	-14.997	1.00	53.53	7	C	N
ATOM	6857	CA	LYS	C	100	-28.011	-22.290	-15.472	1.00	52.84	6	C	C
ATOM	6858	C	LYS	C	100	-27.612	-20.976	-16.135	1.00	51.17	6	C	C
ATOM	6859	O	LYS	C	100	-26.978	-20.125	-15.511	1.00	49.42	8	C	O
ATOM	6860	CB	LYS	C	100	-28.955	-21.963	-14.322	1.00	55.05	6	C	C
ATOM	6861	CG	LYS	C	100	-29.970	-23.030	-13.953	1.00	57.76	6	C	C
ATOM	6862	CD	LYS	C	100	-30.649	-22.641	-12.635	1.00	60.11	6	C	C
ATOM	6863	CE	LYS	C	100	-32.132	-22.996	-12.679	1.00	61.47	6	C	C
ATOM	6864	NZ	LYS	C	100	-32.898	-22.257	-11.634	1.00	61.70	7	C	N
ATOM	6865	N	ARG	C	101	-27.997	-20.779	-17.393	1.00	48.89	7	C	N

88/188

ATOM	6866	CA	ARG	C	101	-27.766	-19.563	-18.142	1.00	47.43	6	C	C
ATOM	6867	C	ARG	C	101	-26.280	-19.288	-18.384	1.00	45.44	6	C	C
ATOM	6868	O	ARG	C	101	-25.912	-18.203	-18.842	1.00	43.82	8	C	O
ATOM	6869	CB	ARG	C	101	-28.375	-18.333	-17.455	1.00	48.99	6	C	C
ATOM	6870	CG	ARG	C	101	-29.892	-18.354	-17.354	1.00	49.70	6	C	C
ATOM	6871	CD	ARG	C	101	-30.566	-18.510	-18.705	1.00	51.07	6	C	C
ATOM	6872	NE	ARG	C	101	-30.199	-17.478	-19.675	1.00	51.06	7	C	N
ATOM	6873	CZ	ARG	C	101	-30.922	-16.405	-19.952	1.00	51.72	6	C	C
ATOM	6874	NH1	ARG	C	101	-32.093	-16.228	-19.324	1.00	52.43	7	C	N
ATOM	6875	NH2	ARG	C	101	-30.618	-15.436	-20.811	1.00	51.22	7	C	N
ATOM	6876	N	LYS	C	102	-25.484	-20.298	-18.063	1.00	42.46	7	C	N
ATOM	6877	CA	LYS	C	102	-24.042	-20.194	-18.269	1.00	41.98	6	C	C
ATOM	6878	C	LYS	C	102	-23.810	-19.976	-19.753	1.00	41.79	6	C	C
ATOM	6879	O	LYS	C	102	-24.618	-20.375	-20.624	1.00	41.91	8	C	O
ATOM	6880	CB	LYS	C	102	-23.345	-21.431	-17.702	1.00	41.61	6	C	C
ATOM	6881	CG	LYS	C	102	-21.928	-21.652	-18.191	1.00	42.12	6	C	C
ATOM	6882	CD	LYS	C	102	-21.377	-22.955	-17.655	1.00	43.40	6	C	C
ATOM	6883	CE	LYS	C	102	-19.879	-23.073	-17.929	1.00	44.04	6	C	C
ATOM	6884	NZ	LYS	C	102	-19.430	-24.476	-17.693	1.00	44.23	7	C	N
ATOM	6885	N	ILE	C	103	-22.753	-19.229	-20.071	1.00	37.96	7	C	N
ATOM	6886	CA	ILE	C	103	-22.527	-18.954	-21.483	1.00	35.01	6	C	C
ATOM	6887	C	ILE	C	103	-21.171	-19.535	-21.883	1.00	35.04	6	C	C
ATOM	6888	O	ILE	C	103	-20.169	-19.322	-21.199	1.00	30.84	8	C	O
ATOM	6889	CB	ILE	C	103	-22.736	-17.498	-21.865	1.00	34.85	6	C	C
ATOM	6890	CG1AILE	C	103	-24.114	-16.962	-21.453	0.50	35.97	6	C	C	
ATOM	6891	CG1BILE	C	103	-21.727	-17.009	-22.899	0.50	35.27	6	C	C	
ATOM	6892	CG2AILE	C	103	-22.454	-17.250	-23.337	0.50	35.19	6	C	C	
ATOM	6893	CG2BILE	C	103	-22.879	-16.579	-20.673	0.50	35.77	6	C	C	
ATOM	6894	CD1AILE	C	103	-24.238	-15.457	-21.640	0.50	34.74	6	C	C	
ATOM	6895	CD1BILE	C	103	-22.162	-15.855	-23.762	0.50	34.70	6	C	C	
ATOM	6896	N	THR	C	104	-21.215	-20.271	-23.012	1.00	33.65	7	C	N
ATOM	6897	CA	THR	C	104	-19.978	-20.862	-23.516	1.00	33.03	6	C	C
ATOM	6898	C	THR	C	104	-19.855	-20.519	-24.997	1.00	32.25	6	C	C
ATOM	6899	O	THR	C	104	-18.909	-20.935	-25.671	1.00	32.49	8	C	O
ATOM	6900	CB	THR	C	104	-19.864	-22.381	-23.370	1.00	33.19	6	C	C
ATOM	6901	OG1	THR	C	104	-21.078	-22.995	-23.880	1.00	34.62	8	C	O
ATOM	6902	CG2	THR	C	104	-19.559	-22.849	-21.970	1.00	33.02	6	C	C
ATOM	6903	N	HIS	C	105	-20.806	-19.773	-25.520	1.00	32.11	7	C	N
ATOM	6904	CA	HIS	C	105	-20.796	-19.379	-26.919	1.00	32.82	6	C	C
ATOM	6905	C	HIS	C	105	-20.674	-17.864	-26.995	1.00	32.05	6	C	C
ATOM	6906	O	HIS	C	105	-21.702	-17.202	-26.974	1.00	31.54	8	C	O
ATOM	6907	CB	HIS	C	105	-22.087	-19.841	-27.612	1.00	33.49	6	C	C
ATOM	6908	CG	HIS	C	105	-22.165	-21.335	-27.514	1.00	38.43	6	C	C
ATOM	6909	ND1	HIS	C	105	-23.094	-21.984	-26.744	1.00	38.76	7	C	N
ATOM	6910	CD2	HIS	C	105	-21.392	-22.290	-28.093	1.00	38.65	6	C	C
ATOM	6911	CE1	HIS	C	105	-22.901	-23.288	-26.848	1.00	39.98	6	C	C
ATOM	6912	NE2	HIS	C	105	-21.878	-23.500	-27.659	1.00	39.50	7	C	N
ATOM	6913	N	PRO	C	106	-19.460	-17.345	-27.047	1.00	30.64	7	C	N
ATOM	6914	CA	PRO	C	106	-19.256	-15.895	-27.044	1.00	29.60	6	C	C
ATOM	6915	C	PRO	C	106	-19.961	-15.184	-28.168	1.00	29.85	6	C	C
ATOM	6916	O	PRO	C	106	-19.998	-15.749	-29.271	1.00	29.81	8	C	O
ATOM	6917	CB	PRO	C	106	-17.734	-15.782	-27.084	1.00	29.76	6	C	C
ATOM	6918	CG	PRO	C	106	-17.261	-17.098	-27.666	1.00	29.01	6	C	C
ATOM	6919	CD	PRO	C	106	-18.201	-18.120	-27.089	1.00	29.27	6	C	C
ATOM	6920	N	ARG	C	107	-20.451	-13.945	-28.028	1.00	28.31	7	C	N
ATOM	6921	CA	ARG	C	107	-20.987	-13.187	-29.135	1.00	26.53	6	C	C
ATOM	6922	C	ARG	C	107	-19.971	-12.243	-29.744	1.00	26.74	6	C	C
ATOM	6923	O	ARG	C	107	-19.384	-11.389	-29.061	1.00	25.16	8	C	O
ATOM	6924	CB	ARG	C	107	-22.199	-12.299	-28.749	1.00	25.58	6	C	C
ATOM	6925	CG	ARG	C	107	-23.258	-12.988	-27.924	1.00	26.17	6	C	C
ATOM	6926	CD	ARG	C	107	-24.089	-11.974	-27.111	1.00	27.80	6	C	C
ATOM	6927	NE	ARG	C	107	-23.388	-11.523	-25.902	1.00	28.42	7	C	N
ATOM	6928	CZ	ARG	C	107	-23.933	-10.697	-24.996	1.00	27.33	6	C	C
ATOM	6929	NH1	ARG	C	107	-25.171	-10.280	-25.211	1.00	25.32	7	C	N
ATOM	6930	NH2	ARG	C	107	-23.207	-10.297	-23.957	1.00	28.25	7	C	N
ATOM	6931	N	PRO	C	108	-19.815	-12.316	-31.067	1.00	27.67	7	C	N
ATOM	6932	CA	PRO	C	108	-18.974	-11.430	-31.834	1.00	26.12	6	C	C
ATOM	6933	C	PRO	C	108	-19.474	-10.015	-31.552	1.00	24.01	6	C	C
ATOM	6934	O	PRO	C	108	-20.698	-9.843	-31.413	1.00	21.14	8	C	O
ATOM	6935	CB	PRO	C	108	-19.258	-11.779	-33.308	1.00	27.50	6	C	C
ATOM	6936	CG	PRO	C	108	-19.542	-13.253	-33.170	1.00	28.19	6	C	C
ATOM	6937	CD	PRO	C	108	-20.483	-13.283	-31.976	1.00	29.31	6	C	C
ATOM	6938	N	GLY	C	109	-18.530	-9.101	-31.457	1.00	22.05	7	C	N
ATOM	6939	CA	GLY	C	109	-19.006	-7.737	-31.145	1.00	23.44	6	C	C
ATOM	6940	C	GLY	C	109	-19.106	-7.494	-29.644	1.00	20.46	6	C	C
ATOM	6941	O	GLY	C	109	-19.018	-6.299	-29.296	1.00	20.71	8	C	O
ATOM	6942	N	HIS	C	110	-19.303	-8.491	-28.797	1.00	22.06	7	C	N
ATOM	6943	CA	HIS	C	110	-19.437	-8.191	-27.358	1.00	22.99	6	C	C
ATOM	6944	C	HIS	C	110	-18.170	-8.494	-26.581	1.00	23.93	6	C	C

89/188

ATOM	6945	O	HIS	C	110	-17.122	-8.847	-27.107	1.00	21.01	8	C	O
ATOM	6946	CB	HIS	C	110	-20.713	-8.840	-26.814	1.00	25.98	6	C	C
ATOM	6947	CG	HIS	C	110	-21.532	-8.010	-25.864	1.00	27.11	6	C	C
ATOM	6948	ND1	HIS	C	110	-21.028	-7.599	-24.607	1.00	27.66	7	C	N
ATOM	6949	CD2	HIS	C	110	-22.776	-7.516	-25.975	1.00	26.53	6	C	C
ATOM	6950	CE1	HIS	C	110	-21.994	-6.893	-24.029	1.00	30.86	6	C	C
ATOM	6951	NE2	HIS	C	110	-23.055	-6.815	-24.813	1.00	28.86	7	C	N
ATOM	6952	N	ALA	C	111	-18.161	-8.306	-25.249	1.00	21.71	7	C	N
ATOM	6953	CA	ALA	C	111	-16.956	-8.487	-24.451	1.00	20.94	6	C	C
ATOM	6954	C	ALA	C	111	-16.789	-9.933	-23.979	1.00	19.46	6	C	C
ATOM	6955	O	ALA	C	111	-15.750	-10.262	-23.395	1.00	20.64	8	C	O
ATOM	6956	CB	ALA	C	111	-17.013	-7.587	-23.210	1.00	17.34	6	C	C
ATOM	6957	N	ASP	C	112	-17.667	-10.820	-24.420	1.00	18.33	7	C	N
ATOM	6958	CA	ASP	C	112	-17.657	-12.170	-23.857	1.00	19.37	6	C	C
ATOM	6959	C	ASP	C	112	-16.312	-12.867	-23.870	1.00	19.64	6	C	C
ATOM	6960	O	ASP	C	112	-15.764	-13.209	-22.815	1.00	22.01	8	C	O
ATOM	6961	CB	ASP	C	112	-18.647	-13.093	-24.596	1.00	21.44	6	C	C
ATOM	6962	CG	ASP	C	112	-20.036	-12.495	-24.640	1.00	23.45	6	C	C
ATOM	6963	OD1	ASP	C	112	-20.245	-11.524	-23.875	1.00	23.90	8	C	O
ATOM	6964	OD2	ASP	C	112	-20.858	-12.954	-25.428	1.00	19.55	8	C	O
ATOM	6965	N	LEU	C	113	-15.841	-13.212	-25.062	1.00	19.15	7	C	N
ATOM	6966	CA	LEU	C	113	-14.616	-14.020	-25.181	1.00	20.42	6	C	C
ATOM	6967	C	LEU	C	113	-13.394	-13.365	-24.564	1.00	18.59	6	C	C
ATOM	6968	O	LEU	C	113	-12.658	-13.969	-23.797	1.00	22.98	8	C	O
ATOM	6969	CB	LEU	C	113	-14.350	-14.315	-26.666	1.00	17.95	6	C	C
ATOM	6970	CG	LEU	C	113	-13.073	-15.113	-26.979	1.00	18.18	6	C	C
ATOM	6971	CD1	LEU	C	113	-12.994	-16.447	-26.269	1.00	16.87	6	C	C
ATOM	6972	CD2	LEU	C	113	-13.041	-15.315	-28.510	1.00	18.27	6	C	C
ATOM	6973	N	VAL	C	114	-13.079	-12.141	-24.947	1.00	20.60	7	C	N
ATOM	6974	CA	VAL	C	114	-11.911	-11.429	-24.450	1.00	19.83	6	C	C
ATOM	6975	C	VAL	C	114	-11.939	-11.219	-22.952	1.00	19.72	6	C	C
ATOM	6976	O	VAL	C	114	-10.909	-11.435	-22.307	1.00	20.76	8	C	O
ATOM	6977	CB	VAL	C	114	-11.633	-10.155	-25.244	1.00	19.87	6	C	C
ATOM	6978	CG1	VAL	C	114	-10.400	-9.411	-24.729	1.00	16.01	6	C	C
ATOM	6979	CG2	VAL	C	114	-11.398	-10.571	-26.721	1.00	19.96	6	C	C
ATOM	6980	N	GLY	C	115	-13.072	-10.986	-22.372	1.00	23.17	7	C	N
ATOM	6981	CA	GLY	C	115	-13.239	-10.860	-20.909	1.00	22.48	6	C	C
ATOM	6982	C	GLY	C	115	-12.936	-12.236	-20.300	1.00	21.14	6	C	C
ATOM	6983	O	GLY	C	115	-12.331	-12.372	-19.232	1.00	20.11	8	C	O
ATOM	6984	N	GLY	C	116	-13.469	-13.262	-20.956	1.00	21.44	7	C	N
ATOM	6985	CA	GLY	C	116	-13.209	-14.656	-20.525	1.00	18.72	6	C	C
ATOM	6986	C	GLY	C	116	-11.695	-14.892	-20.486	1.00	19.77	6	C	C
ATOM	6987	O	GLY	C	116	-11.183	-15.497	-19.541	1.00	21.54	8	C	O
ATOM	6988	N	ILE	C	117	-10.950	-14.482	-21.497	1.00	20.11	7	C	N
ATOM	6989	CA	ILE	C	117	-9.503	-14.755	-21.535	1.00	19.95	6	C	C
ATOM	6990	C	ILE	C	117	-8.747	-13.956	-20.490	1.00	21.20	6	C	C
ATOM	6991	O	ILE	C	117	-7.919	-14.426	-19.694	1.00	19.98	8	C	O
ATOM	6992	CB	ILE	C	117	-8.962	-14.489	-22.950	1.00	19.75	6	C	C
ATOM	6993	CG1	ILE	C	117	-9.504	-15.559	-23.908	1.00	18.84	6	C	C
ATOM	6994	CG2	ILE	C	117	-7.437	-14.527	-22.995	1.00	20.78	6	C	C
ATOM	6995	CD1	ILE	C	117	-9.377	-15.111	-25.357	1.00	16.19	6	C	C
ATOM	6996	N	LYS	C	118	-9.059	-12.650	-20.473	1.00	19.25	7	C	N
ATOM	6997	CA	LYS	C	118	-8.417	-11.727	-19.544	1.00	18.34	6	C	C
ATOM	6998	C	LYS	C	118	-8.613	-12.122	-18.100	1.00	17.38	6	C	C
ATOM	6999	O	LYS	C	118	-7.691	-12.093	-17.249	1.00	17.85	8	C	O
ATOM	7000	CB	LYS	C	118	-9.030	-10.320	-19.762	1.00	17.28	6	C	C
ATOM	7001	CG	LYS	C	118	-8.258	-9.207	-18.999	1.00	18.65	6	C	C
ATOM	7002	CD	LYS	C	118	-9.086	-7.902	-19.173	1.00	17.25	6	C	C
ATOM	7003	CE	LYS	C	118	-8.688	-6.888	-18.103	1.00	15.78	6	C	C
ATOM	7004	NZ	LYS	C	118	-7.346	-6.299	-18.491	1.00	16.86	7	C	N
ATOM	7005	N	TYR	C	119	-9.859	-12.430	-17.760	1.00	16.06	7	C	N
ATOM	7006	CA	TYR	C	119	-10.189	-12.695	-16.349	1.00	16.09	6	C	C
ATOM	7007	C	TYR	C	119	-10.202	-14.196	-16.023	1.00	19.61	6	C	C
ATOM	7008	O	TYR	C	119	-10.437	-14.560	-14.881	1.00	16.71	8	C	O
ATOM	7009	CB	TYR	C	119	-11.523	-12.042	-15.974	1.00	15.76	6	C	C
ATOM	7010	CG	TYR	C	119	-11.464	-10.515	-15.942	1.00	16.38	6	C	C
ATOM	7011	CD1	TYR	C	119	-12.127	-9.710	-16.854	1.00	15.53	6	C	C
ATOM	7012	CD2	TYR	C	119	-10.663	-9.909	-14.985	1.00	14.77	6	C	C
ATOM	7013	CE1	TYR	C	119	-11.989	-8.320	-16.777	1.00	17.09	6	C	C
ATOM	7014	CE2	TYR	C	119	-10.502	-8.536	-14.910	1.00	15.73	6	C	C
ATOM	7015	CZ	TYR	C	119	-11.216	-7.751	-15.777	1.00	16.78	6	C	C
ATOM	7016	OH	TYR	C	119	-11.108	-6.398	-15.672	1.00	18.14	8	C	O
ATOM	7017	N	ARG	C	120	-9.919	-15.033	-17.005	1.00	20.53	7	C	N
ATOM	7018	CA	ARG	C	120	-9.912	-16.488	-16.843	1.00	22.52	6	C	C
ATOM	7019	C	ARG	C	120	-11.217	-17.099	-16.343	1.00	22.81	6	C	C
ATOM	7020	O	ARG	C	120	-11.266	-17.958	-15.455	1.00	22.69	8	C	O
ATOM	7021	CB	ARG	C	120	-8.716	-16.919	-15.996	1.00	21.47	6	C	C
ATOM	7022	CG	ARG	C	120	-7.439	-16.475	-16.710	1.00	21.64	6	C	C
ATOM	7023	CD	ARG	C	120	-6.224	-17.096	-16.026	1.00	22.55	6	C	C

90/188

ATOM	7024	NE	ARG	C	120	-4.991	-16.700	-16.688	1.00	20.71	7	C	N
ATOM	7025	CZ	ARG	C	120	-3.797	-17.188	-16.374	1.00	21.63	6	C	C
ATOM	7026	NH1	ARG	C	120	-3.621	-18.106	-15.442	1.00	23.84	7	C	N
ATOM	7027	NH2	ARG	C	120	-2.720	-16.757	-16.997	1.00	20.38	7	C	N
ATOM	7028	N	PHE	C	121	-12.287	-16.734	-17.044	1.00	22.94	7	C	N
ATOM	7029	CA	PHE	C	121	-13.608	-17.245	-16.717	1.00	25.17	6	C	C
ATOM	7030	C	PHE	C	121	-13.902	-18.569	-17.432	1.00	26.05	6	C	C
ATOM	7031	O	PHE	C	121	-13.470	-18.798	-18.557	1.00	26.19	8	C	O
ATOM	7032	CB	PHE	C	121	-14.684	-16.254	-17.177	1.00	22.50	6	C	C
ATOM	7033	CG	PHE	C	121	-14.692	-14.904	-16.519	1.00	21.89	6	C	C
ATOM	7034	CD1	PHE	C	121	-15.099	-13.778	-17.214	1.00	21.10	6	C	C
ATOM	7035	CD2	PHE	C	121	-14.437	-14.808	-15.148	1.00	20.66	6	C	C
ATOM	7036	CE1	PHE	C	121	-15.118	-12.531	-16.578	1.00	20.82	6	C	C
ATOM	7037	CE2	PHE	C	121	-14.558	-13.588	-14.503	1.00	18.70	6	C	C
ATOM	7038	CZ	PHE	C	121	-14.892	-12.458	-15.211	1.00	18.59	6	C	C
ATOM	7039	N	ASP	C	122	-14.723	-19.387	-16.806	1.00	29.46	7	C	N
ATOM	7040	CA	ASP	C	122	-15.215	-20.583	-17.501	1.00	31.63	6	C	C
ATOM	7041	C	ASP	C	122	-16.678	-20.308	-17.792	1.00	31.14	6	C	C
ATOM	7042	O	ASP	C	122	-17.265	-20.994	-18.628	1.00	31.38	8	C	O
ATOM	7043	CB	ASP	C	122	-14.915	-21.850	-16.740	1.00	37.20	6	C	C
ATOM	7044	CG	ASP	C	122	-15.330	-21.760	-15.291	1.00	43.03	6	C	C
ATOM	7045	OD1	ASP	C	122	-16.531	-21.455	-15.061	1.00	44.62	8	C	O
ATOM	7046	OD2	ASP	C	122	-14.435	-21.944	-14.428	1.00	46.72	8	C	O
ATOM	7047	N	ASP	C	123	-17.248	-19.209	-17.275	1.00	28.46	7	C	N
ATOM	7048	CA	ASP	C	123	-18.653	-18.891	-17.568	1.00	26.59	6	C	C
ATOM	7049	C	ASP	C	123	-18.733	-17.468	-18.122	1.00	27.00	6	C	C
ATOM	7050	O	ASP	C	123	-18.435	-16.559	-17.334	1.00	25.13	8	C	O
ATOM	7051	CB	ASP	C	123	-19.555	-19.019	-16.348	1.00	26.71	6	C	C
ATOM	7052	CG	ASP	C	123	-21.030	-18.714	-16.612	1.00	25.58	6	C	C
ATOM	7053	OD1	ASP	C	123	-21.869	-18.818	-15.670	1.00	28.27	8	C	O
ATOM	7054	OD2	ASP	C	123	-21.409	-18.370	-17.737	1.00	24.69	8	C	O
ATOM	7055	N	LEU	C	124	-18.990	-17.305	-19.427	1.00	23.92	7	C	N
ATOM	7056	CA	LEU	C	124	-18.936	-15.988	-20.023	1.00	23.03	6	C	C
ATOM	7057	C	LEU	C	124	-20.004	-15.037	-19.505	1.00	24.09	6	C	C
ATOM	7058	O	LEU	C	124	-19.934	-13.820	-19.778	1.00	24.34	8	C	O
ATOM	7059	CB	LEU	C	124	-18.828	-16.052	-21.547	1.00	24.54	6	C	C
ATOM	7060	CG	LEU	C	124	-17.656	-16.901	-22.081	1.00	25.53	6	C	C
ATOM	7061	CD1	LEU	C	124	-17.580	-16.864	-23.601	1.00	24.60	6	C	C
ATOM	7062	CD2	LEU	C	124	-16.297	-16.456	-21.534	1.00	22.65	6	C	C
ATOM	7063	N	ARG	C	125	-20.969	-15.517	-18.722	1.00	23.46	7	C	N
ATOM	7064	CA	ARG	C	125	-21.938	-14.624	-18.131	1.00	25.80	6	C	C
ATOM	7065	C	ARG	C	125	-21.121	-13.645	-17.245	1.00	26.01	6	C	C
ATOM	7066	O	ARG	C	125	-21.570	-12.530	-17.013	1.00	25.84	8	C	O
ATOM	7067	CB	ARG	C	125	-22.905	-15.361	-17.163	1.00	26.57	6	C	C
ATOM	7068	CG	ARG	C	125	-23.954	-14.406	-16.567	1.00	27.11	6	C	C
ATOM	7069	CD	ARG	C	125	-25.235	-15.136	-16.125	1.00	29.53	6	C	C
ATOM	7070	NE	ARG	C	125	-25.976	-15.593	-17.301	1.00	27.87	7	C	N
ATOM	7071	CZ	ARG	C	125	-26.578	-14.867	-18.207	1.00	32.31	6	C	C
ATOM	7072	NH1	ARG	C	125	-26.684	-13.536	-18.126	1.00	32.05	7	C	N
ATOM	7073	NH2	ARG	C	125	-27.133	-15.416	-19.309	1.00	34.25	7	C	N
ATOM	7074	N	ASN	C	126	-19.980	-14.116	-16.733	1.00	25.43	7	C	N
ATOM	7075	CA	ASN	C	126	-19.213	-13.251	-15.819	1.00	25.59	6	C	C
ATOM	7076	C	ASN	C	126	-18.632	-12.067	-16.554	1.00	24.37	6	C	C
ATOM	7077	O	ASN	C	126	-18.228	-11.098	-15.880	1.00	25.69	8	C	O
ATOM	7078	CB	ASN	C	126	-18.170	-14.034	-15.033	1.00	23.12	6	C	C
ATOM	7079	CG	ASN	C	126	-18.870	-14.928	-14.010	1.00	25.06	6	C	C
ATOM	7080	OD1	ASN	C	126	-19.887	-14.570	-13.399	1.00	24.26	8	C	O
ATOM	7081	ND2	ASN	C	126	-18.285	-16.099	-13.803	1.00	23.77	7	C	N
ATOM	7082	N	SER	C	127	-18.561	-12.140	-17.884	1.00	23.26	7	C	N
ATOM	7083	CA	SER	C	127	-18.181	-10.983	-18.653	1.00	25.16	6	C	C
ATOM	7084	C	SER	C	127	-19.460	-10.127	-18.894	1.00	25.13	6	C	C
ATOM	7085	O	SER	C	127	-19.427	-8.911	-18.794	1.00	23.61	8	C	O
ATOM	7086	CB	SER	C	127	-17.668	-11.144	-20.068	1.00	25.71	6	C	C
ATOM	7087	OG	SER	C	127	-16.538	-11.898	-20.274	1.00	28.94	8	C	O
ATOM	7088	N	LEU	C	128	-20.475	-10.812	-19.363	1.00	23.42	7	C	N
ATOM	7089	CA	LEU	C	128	-21.715	-10.147	-19.799	1.00	26.53	6	C	C
ATOM	7090	C	LEU	C	128	-22.331	-9.270	-18.735	1.00	22.98	6	C	C
ATOM	7091	O	LEU	C	128	-22.749	-8.169	-19.060	1.00	26.52	8	C	O
ATOM	7092	CB	LEU	C	128	-22.723	-11.220	-20.271	1.00	28.05	6	C	C
ATOM	7093	CG	LEU	C	128	-24.196	-10.974	-20.490	1.00	31.17	6	C	C
ATOM	7094	CD1	LEU	C	128	-24.909	-12.236	-21.018	1.00	31.76	6	C	C
ATOM	7095	CD2	LEU	C	128	-24.996	-10.566	-19.260	1.00	29.99	6	C	C
ATOM	7096	N	GLU	C	129	-22.485	-9.732	-17.523	1.00	23.06	7	C	N
ATOM	7097	CA	GLU	C	129	-23.207	-9.041	-16.454	1.00	22.01	6	C	C
ATOM	7098	C	GLU	C	129	-22.722	-7.623	-16.194	1.00	21.43	6	C	C
ATOM	7099	O	GLU	C	129	-23.534	-6.720	-15.989	1.00	20.66	8	C	O
ATOM	7100	CB	GLU	C	129	-23.149	-9.909	-15.191	1.00	19.76	6	C	C
ATOM	7101	CG	GLU	C	129	-24.097	-11.101	-15.248	1.00	23.10	6	C	C
ATOM	7102	CD	GLU	C	129	-25.537	-10.698	-15.470	1.00	23.60	6	C	C

91/188

ATOM	7103	OE1	GLU	C	129	-26.018	-9.719	-14.855	1.00	23.18	8	C	O
ATOM	7104	OE2	GLU	C	129	-26.191	-11.362	-16.299	1.00	25.39	8	C	O
ATOM	7105	N	ARG	C	130	-21.413	-7.415	-16.281	1.00	21.33	7	C	N
ATOM	7106	CA	ARG	C	130	-20.837	-6.086	-16.083	1.00	19.11	6	C	C
ATOM	7107	C	ARG	C	130	-20.567	-5.354	-17.385	1.00	18.67	6	C	C
ATOM	7108	O	ARG	C	130	-20.658	-4.099	-17.339	1.00	20.27	8	C	O
ATOM	7109	CB	ARG	C	130	-19.551	-6.169	-15.235	1.00	17.72	6	C	C
ATOM	7110	CG	ARG	C	130	-18.832	-4.837	-15.033	1.00	18.82	6	C	C
ATOM	7111	CD	ARG	C	130	-19.648	-3.885	-14.120	1.00	18.36	6	C	C
ATOM	7112	NE	ARG	C	130	-19.126	-2.522	-14.120	1.00	16.03	7	C	N
ATOM	7113	CZ	ARG	C	130	-19.802	-1.475	-13.644	1.00	18.35	6	C	C
ATOM	7114	NH1	ARG	C	130	-21.035	-1.584	-13.109	1.00	18.07	7	C	N
ATOM	7115	NH2	ARG	C	130	-19.235	-0.275	-13.719	1.00	15.80	7	C	N
ATOM	7116	N	SER	C	131	-20.255	-6.023	-18.497	1.00	18.69	7	C	N
ATOM	7117	CA	SER	C	131	-20.025	-5.292	-19.729	1.00	20.20	6	C	C
ATOM	7118	C	SER	C	131	-21.366	-4.790	-20.283	1.00	20.97	6	C	C
ATOM	7119	O	SER	C	131	-21.359	-3.822	-21.050	1.00	17.81	8	C	O
ATOM	7120	CB	SER	C	131	-19.292	-6.132	-20.794	1.00	19.22	6	C	C
ATOM	7121	OG	SER	C	131	-20.198	-7.163	-21.246	1.00	20.13	8	C	O
ATOM	7122	N	SER	C	132	-22.482	-5.317	-19.749	1.00	18.38	7	C	N
ATOM	7123	CA	SER	C	132	-23.779	-4.829	-20.267	1.00	20.78	6	C	C
ATOM	7124	C	SER	C	132	-23.980	-3.317	-20.138	1.00	20.67	6	C	C
ATOM	7125	O	SER	C	132	-23.620	-2.670	-19.146	1.00	20.52	8	C	O
ATOM	7126	CB	SER	C	132	-24.956	-5.547	-19.598	1.00	22.38	6	C	C
ATOM	7127	OG	SER	C	132	-26.180	-4.976	-20.005	1.00	25.45	8	C	O
ATOM	7128	N	ALA	C	133	-24.696	-2.757	-21.151	1.00	18.92	7	C	N
ATOM	7129	CA	ALA	C	133	-24.968	-1.311	-21.084	1.00	20.94	6	C	C
ATOM	7130	C	ALA	C	133	-26.011	-0.982	-20.023	1.00	19.92	6	C	C
ATOM	7131	O	ALA	C	133	-26.411	0.180	-19.885	1.00	20.23	8	C	O
ATOM	7132	CB	ALA	C	133	-25.289	-0.700	-22.442	1.00	22.72	6	C	C
ATOM	7133	N	ARG	C	134	-26.427	-1.978	-19.216	1.00	22.34	7	C	N
ATOM	7134	CA	ARG	C	134	-27.284	-1.683	-18.059	1.00	21.27	6	C	C
ATOM	7135	C	ARG	C	134	-26.555	-0.669	-17.165	1.00	22.67	6	C	C
ATOM	7136	O	ARG	C	134	-27.137	0.217	-16.532	1.00	21.43	8	C	O
ATOM	7137	CB	ARG	C	134	-27.591	-2.919	-17.206	1.00	21.65	6	C	C
ATOM	7138	CG	ARG	C	134	-28.438	-2.652	-15.934	1.00	21.80	6	C	C
ATOM	7139	CD	ARG	C	134	-29.919	-2.395	-16.349	1.00	20.85	6	C	C
ATOM	7140	NE	ARG	C	134	-30.705	-2.137	-15.137	1.00	22.90	7	C	N
ATOM	7141	CZ	ARG	C	134	-31.628	-1.197	-14.989	1.00	22.23	6	C	C
ATOM	7142	NH1	ARG	C	134	-31.928	-0.434	-16.049	1.00	20.10	7	C	N
ATOM	7143	NH2	ARG	C	134	-32.281	-0.979	-13.854	1.00	21.07	7	C	N
ATOM	7144	N	GLU	C	135	-25.212	-0.701	-17.179	1.00	23.64	7	C	N
ATOM	7145	CA	GLU	C	135	-24.373	0.178	-16.361	1.00	22.05	6	C	C
ATOM	7146	C	GLU	C	135	-24.522	1.624	-16.760	1.00	21.30	6	C	C
ATOM	7147	O	GLU	C	135	-24.228	2.527	-15.968	1.00	19.47	8	C	O
ATOM	7148	CB	GLU	C	135	-22.896	-0.239	-16.510	1.00	23.07	6	C	C
ATOM	7149	CG	GLU	C	135	-21.794	0.572	-15.891	1.00	21.99	6	C	C
ATOM	7150	CD	GLU	C	135	-21.327	1.785	-16.688	1.00	23.18	6	C	C
ATOM	7151	OE1	GLU	C	135	-20.660	2.620	-16.034	1.00	20.27	8	C	O
ATOM	7152	OE2	GLU	C	135	-21.796	2.073	-17.827	1.00	21.72	8	C	O
ATOM	7153	N	THR	C	136	-24.883	1.843	-18.043	1.00	22.31	7	C	N
ATOM	7154	CA	THR	C	136	-25.045	3.239	-18.505	1.00	20.12	6	C	C
ATOM	7155	C	THR	C	136	-26.163	3.922	-17.723	1.00	20.54	6	C	C
ATOM	7156	O	THR	C	136	-26.230	5.155	-17.641	1.00	22.16	8	C	O
ATOM	7157	CB	THR	C	136	-25.378	3.385	-20.009	1.00	22.04	6	C	C
ATOM	7158	OG1	THR	C	136	-26.642	2.804	-20.308	1.00	20.31	8	C	O
ATOM	7159	CG2	THR	C	136	-24.301	2.806	-20.897	1.00	19.15	6	C	C
ATOM	7160	N	THR	C	137	-27.014	3.153	-17.079	1.00	18.21	7	C	N
ATOM	7161	CA	THR	C	137	-28.054	3.791	-16.206	1.00	17.35	6	C	C
ATOM	7162	C	THR	C	137	-27.354	4.648	-15.144	1.00	17.51	6	C	C
ATOM	7163	O	THR	C	137	-27.746	5.766	-14.814	1.00	17.17	8	C	O
ATOM	7164	CB	THR	C	137	-28.768	2.665	-15.441	1.00	17.05	6	C	C
ATOM	7165	OG1	THR	C	137	-29.294	1.656	-16.315	1.00	19.56	8	C	O
ATOM	7166	CG2	THR	C	137	-29.865	3.224	-14.535	1.00	16.20	6	C	C
ATOM	7167	N	MET	C	138	-26.366	4.090	-14.427	1.00	17.24	7	C	N
ATOM	7168	CA	MET	C	138	-25.672	4.928	-13.408	1.00	16.96	6	C	C
ATOM	7169	C	MET	C	138	-24.840	6.044	-14.052	1.00	16.83	6	C	C
ATOM	7170	O	MET	C	138	-24.638	7.061	-13.359	1.00	17.95	8	C	O
ATOM	7171	CB	MET	C	138	-24.761	4.126	-12.503	1.00	15.94	6	C	C
ATOM	7172	CG	MET	C	138	-25.399	2.891	-11.885	1.00	16.93	6	C	C
ATOM	7173	SE	MET	C	138	-27.232	3.681	-11.098	1.00	42.10	34	C	SE
ATOM	7174	CE2	MET	C	138	-26.493	4.947	-9.804	1.00	17.13	6	C	C
ATOM	7175	N	ARG	C	139	-24.298	5.841	-15.247	1.00	14.02	7	C	N
ATOM	7176	CA	ARG	C	139	-23.602	6.968	-15.860	1.00	18.31	6	C	C
ATOM	7177	C	ARG	C	139	-24.592	8.116	-16.124	1.00	17.47	6	C	C
ATOM	7178	O	ARG	C	139	-24.233	9.290	-16.041	1.00	18.49	8	C	O
ATOM	7179	CB	ARG	C	139	-22.888	6.555	-17.150	1.00	19.34	6	C	C
ATOM	7180	CG	ARG	C	139	-21.801	5.505	-16.928	1.00	17.85	6	C	C
ATOM	7181	CD	ARG	C	139	-21.000	5.301	-18.215	1.00	20.23	6	C	C

92/188

ATOM	7182	NE	ARG	C	139	-20.049	6.367	-18.412	1.00	18.73	7	C	N
ATOM	7183	CZ	ARG	C	139	-19.115	6.398	-19.393	1.00	17.81	6	C	C
ATOM	7184	NH1	ARG	C	139	-19.031	5.414	-20.265	1.00	15.64	7	C	N
ATOM	7185	NH2	ARG	C	139	-18.294	7.451	-19.454	1.00	16.75	7	C	N
ATOM	7186	N	VAL	C	140	-25.828	7.794	-16.505	1.00	17.50	7	C	N
ATOM	7187	CA	VAL	C	140	-26.858	8.833	-16.699	1.00	18.24	6	C	C
ATOM	7188	C	VAL	C	140	-27.196	9.574	-15.398	1.00	15.86	6	C	C
ATOM	7189	O	VAL	C	140	-27.361	10.772	-15.300	1.00	17.92	8	C	O
ATOM	7190	CB	VAL	C	140	-28.120	8.175	-17.292	1.00	18.90	6	C	C
ATOM	7191	CG1	VAL	C	140	-29.303	9.162	-17.284	1.00	19.59	6	C	C
ATOM	7192	CG2	VAL	C	140	-27.803	7.778	-18.710	1.00	17.47	6	C	C
ATOM	7193	N	ALA	C	141	-27.209	8.812	-14.335	1.00	18.06	7	C	N
ATOM	7194	CA	ALA	C	141	-27.505	9.284	-12.980	1.00	17.98	6	C	C
ATOM	7195	C	ALA	C	141	-26.417	10.245	-12.519	1.00	18.88	6	C	C
ATOM	7196	O	ALA	C	141	-26.664	11.311	-12.004	1.00	16.49	8	C	O
ATOM	7197	CB	ALA	C	141	-27.489	8.110	-12.047	1.00	15.99	6	C	C
ATOM	7198	N	VAL	C	142	-25.157	9.836	-12.798	1.00	19.38	7	C	N
ATOM	7199	CA	VAL	C	142	-24.079	10.772	-12.380	1.00	16.63	6	C	C
ATOM	7200	C	VAL	C	142	-24.219	11.994	-13.266	1.00	17.36	6	C	C
ATOM	7201	O	VAL	C	142	-23.989	13.158	-12.843	1.00	19.36	8	C	O
ATOM	7202	CB	VAL	C	142	-22.749	10.011	-12.533	1.00	16.81	6	C	C
ATOM	7203	CG1	VAL	C	142	-21.579	11.008	-12.510	1.00	18.96	6	C	C
ATOM	7204	CG2	VAL	C	142	-22.540	9.017	-11.406	1.00	15.29	6	C	C
ATOM	7205	N	GLY	C	143	-24.516	11.743	-14.544	1.00	15.26	7	C	N
ATOM	7206	CA	GLY	C	143	-24.698	12.880	-15.458	1.00	17.55	6	C	C
ATOM	7207	C	GLY	C	143	-25.765	13.873	-15.057	1.00	17.32	6	C	C
ATOM	7208	O	GLY	C	143	-25.723	15.086	-15.328	1.00	20.26	8	C	O
ATOM	7209	N	ALA	C	144	-26.813	13.400	-14.404	1.00	18.99	7	C	N
ATOM	7210	CA	ALA	C	144	-27.915	14.263	-13.973	1.00	17.70	6	C	C
ATOM	7211	C	ALA	C	144	-27.479	15.138	-12.810	1.00	18.95	6	C	C
ATOM	7212	O	ALA	C	144	-27.905	16.293	-12.764	1.00	18.02	8	C	O
ATOM	7213	CB	ALA	C	144	-29.115	13.439	-13.562	1.00	19.16	6	C	C
ATOM	7214	N	VAL	C	145	-26.617	14.659	-11.926	1.00	17.84	7	C	N
ATOM	7215	CA	VAL	C	145	-26.022	15.534	-10.902	1.00	18.02	6	C	C
ATOM	7216	C	VAL	C	145	-25.155	16.588	-11.577	1.00	16.56	6	C	C
ATOM	7217	O	VAL	C	145	-25.152	17.786	-11.241	1.00	17.60	8	C	O
ATOM	7218	CB	VAL	C	145	-25.206	14.657	-9.925	1.00	18.33	6	C	C
ATOM	7219	CG1	VAL	C	145	-24.629	15.523	-8.813	1.00	17.70	6	C	C
ATOM	7220	CG2	VAL	C	145	-26.065	13.501	-9.350	1.00	16.13	6	C	C
ATOM	7221	N	ALA	C	146	-24.349	16.211	-12.570	1.00	16.44	7	C	N
ATOM	7222	CA	ALA	C	146	-23.467	17.151	-13.258	1.00	16.15	6	C	C
ATOM	7223	C	ALA	C	146	-24.296	18.247	-13.962	1.00	14.87	6	C	C
ATOM	7224	O	ALA	C	146	-23.987	19.455	-13.925	1.00	15.97	8	C	O
ATOM	7225	CB	ALA	C	146	-22.629	16.381	-14.279	1.00	14.02	6	C	C
ATOM	7226	N	LYS	C	147	-25.413	17.806	-14.536	1.00	14.76	7	C	N
ATOM	7227	CA	LYS	C	147	-26.277	18.761	-15.254	1.00	18.42	6	C	C
ATOM	7228	C	LYS	C	147	-26.894	19.813	-14.357	1.00	21.00	6	C	C
ATOM	7229	O	LYS	C	147	-27.107	20.965	-14.756	1.00	23.05	8	C	O
ATOM	7230	CB	LYS	C	147	-27.346	17.967	-16.011	1.00	20.42	6	C	C
ATOM	7231	CG	LYS	C	147	-26.851	17.454	-17.361	1.00	17.63	6	C	C
ATOM	7232	CD	LYS	C	147	-27.908	16.557	-18.022	1.00	21.70	6	C	C
ATOM	7233	CE	LYS	C	147	-29.236	17.299	-18.256	1.00	22.27	6	C	C
ATOM	7234	NZ	LYS	C	147	-30.260	16.393	-18.848	1.00	22.38	7	C	N
ATOM	7235	N	ARG	C	148	-27.198	19.431	-13.111	1.00	21.24	7	C	N
ATOM	7236	CA	ARG	C	148	-27.705	20.400	-12.128	1.00	22.25	6	C	C
ATOM	7237	C	ARG	C	148	-26.655	21.466	-11.867	1.00	23.62	6	C	C
ATOM	7238	O	ARG	C	148	-26.971	22.652	-11.680	1.00	21.93	8	C	O
ATOM	7239	CB	ARG	C	148	-28.037	19.697	-10.809	1.00	21.80	6	C	C
ATOM	7240	CG	ARG	C	148	-29.326	18.902	-10.815	1.00	25.99	6	C	C
ATOM	7241	CD	ARG	C	148	-30.549	19.842	-10.912	1.00	26.60	6	C	C
ATOM	7242	NE	ARG	C	148	-30.377	20.875	-9.963	1.00	27.82	7	C	N
ATOM	7243	CZ	ARG	C	148	-30.372	22.198	-10.001	1.00	28.72	6	C	C
ATOM	7244	NH1	ARG	C	148	-30.606	22.861	-11.109	1.00	28.97	7	C	N
ATOM	7245	NH2	ARG	C	148	-30.069	22.821	-8.869	1.00	28.03	7	C	N
ATOM	7246	N	LEU	C	149	-25.370	21.049	-11.788	1.00	23.06	7	C	N
ATOM	7247	CA	LEU	C	149	-24.329	22.059	-11.632	1.00	24.63	6	C	C
ATOM	7248	C	LEU	C	149	-24.259	22.952	-12.879	1.00	22.39	6	C	C
ATOM	7249	O	LEU	C	149	-24.051	24.166	-12.734	1.00	22.38	8	C	O
ATOM	7250	CB	LEU	C	149	-22.932	21.508	-11.397	1.00	26.23	6	C	C
ATOM	7251	CG	LEU	C	149	-22.486	21.129	-10.007	1.00	29.65	6	C	C
ATOM	7252	CD1	LEU	C	149	-21.275	20.215	-10.086	1.00	30.76	6	C	C
ATOM	7253	CD2	LEU	C	149	-22.189	22.376	-9.163	1.00	28.61	6	C	C
ATOM	7254	N	LEU	C	150	-24.389	22.375	-14.067	1.00	21.60	7	C	N
ATOM	7255	CA	LEU	C	150	-24.343	23.212	-15.268	1.00	19.76	6	C	C
ATOM	7256	C	LEU	C	150	-25.514	24.196	-15.275	1.00	20.47	6	C	C
ATOM	7257	O	LEU	C	150	-25.363	25.373	-15.619	1.00	18.63	8	C	O
ATOM	7258	CB	LEU	C	150	-24.351	22.360	-16.526	1.00	22.71	6	C	C
ATOM	7259	CG	LEU	C	150	-23.220	21.345	-16.711	1.00	24.93	6	C	C
ATOM	7260	CD1	LEU	C	150	-23.284	20.652	-18.076	1.00	23.86	6	C	C

93/188

ATOM	7261	CD2	LEU	C	150	-21.844	21.981	-16.523	1.00	25.65	6	C	C
ATOM	7262	N	ALA	C	151	-26.705	23.678	-14.895	1.00	20.88	7	C	N
ATOM	7263	CA	ALA	C	151	-27.874	24.538	-14.841	1.00	21.43	6	C	C
ATOM	7264	C	ALA	C	151	-27.661	25.725	-13.902	1.00	22.80	6	C	C
ATOM	7265	O	ALA	C	151	-28.140	26.821	-14.210	1.00	22.87	8	C	O
ATOM	7266	CB	ALA	C	151	-29.157	23.802	-14.428	1.00	21.64	6	C	C
ATOM	7267	N	GLU	C	152	-27.068	25.485	-12.742	1.00	21.81	7	C	N
ATOM	7268	CA	GLU	C	152	-26.767	26.551	-11.796	1.00	22.04	6	C	C
ATOM	7269	C	GLU	C	152	-25.782	27.531	-12.376	1.00	22.73	6	C	C
ATOM	7270	O	GLU	C	152	-25.751	28.676	-11.912	1.00	22.04	8	C	O
ATOM	7271	CB	GLU	C	152	-26.284	25.975	-10.456	1.00	23.07	6	C	C
ATOM	7272	CG	GLU	C	152	-27.415	25.226	-9.761	1.00	23.13	6	C	C
ATOM	7273	CD	GLU	C	152	-28.371	26.183	-9.052	1.00	26.79	6	C	C
ATOM	7274	OE1	GLU	C	152	-29.434	25.682	-8.635	1.00	27.99	8	C	O
ATOM	7275	OE2	GLU	C	152	-28.106	27.401	-8.884	1.00	26.79	8	C	O
ATOM	7276	N	LEU	C	153	-25.017	27.169	-13.404	1.00	22.40	7	C	N
ATOM	7277	CA	LEU	C	153	-24.090	28.106	-14.000	1.00	22.64	6	C	C
ATOM	7278	C	LEU	C	153	-24.583	28.655	-15.347	1.00	24.54	6	C	C
ATOM	7279	O	LEU	C	153	-23.779	29.099	-16.154	1.00	24.17	8	C	O
ATOM	7280	CB	LEU	C	153	-22.695	27.486	-14.145	1.00	25.54	6	C	C
ATOM	7281	CG	LEU	C	153	-22.118	26.972	-12.826	1.00	26.31	6	C	C
ATOM	7282	CD1	LEU	C	153	-20.851	26.178	-13.081	1.00	27.05	6	C	C
ATOM	7283	CD2	LEU	C	153	-21.860	28.091	-11.838	1.00	26.25	6	C	C
ATOM	7284	N	ASP	C	154	-25.870	28.610	-15.590	1.00	24.92	7	C	N
ATOM	7285	CA	ASP	C	154	-26.556	29.137	-16.750	1.00	28.38	6	C	C
ATOM	7286	C	ASP	C	154	-26.175	28.428	-18.047	1.00	28.04	6	C	C
ATOM	7287	O	ASP	C	154	-26.082	29.084	-19.097	1.00	30.30	8	C	O
ATOM	7288	CB	ASP	C	154	-26.247	30.653	-16.840	1.00	30.07	6	C	C
ATOM	7289	CG	ASP	C	154	-26.672	31.344	-15.532	1.00	34.31	6	C	C
ATOM	7290	OD1	ASP	C	154	-27.888	31.348	-15.288	1.00	34.56	8	C	O
ATOM	7291	OD2	ASP	C	154	-25.764	31.783	-14.790	1.00	37.10	8	C	O
ATOM	7292	N	MET	C	155	-25.883	27.149	-18.012	1.00	25.95	7	C	N
ATOM	7293	CA	MET	C	155	-25.529	26.417	-19.238	1.00	25.61	6	C	C
ATOM	7294	C	MET	C	155	-26.694	25.479	-19.573	1.00	26.46	6	C	C
ATOM	7295	O	MET	C	155	-27.509	25.205	-18.695	1.00	24.84	8	C	O
ATOM	7296	CB	MET	C	155	-24.235	25.661	-19.013	1.00	25.07	6	C	C
ATOM	7297	CG	MET	C	155	-23.099	26.614	-18.694	1.00	24.71	6	C	C
ATOM	7298	SE	MET	C	155	-21.444	25.523	-18.105	1.00	45.37	34	C	SE
ATOM	7299	CE2	MET	C	155	-20.958	24.543	-19.516	1.00	36.01	6	C	C
ATOM	7300	N	GLU	C	156	-26.714	25.008	-20.803	1.00	25.75	7	C	N
ATOM	7301	CA	GLU	C	156	-27.762	24.172	-21.341	1.00	25.27	6	C	C
ATOM	7302	C	GLU	C	156	-27.173	23.044	-22.178	1.00	22.44	6	C	C
ATOM	7303	O	GLU	C	156	-26.142	23.238	-22.809	1.00	21.03	8	C	O
ATOM	7304	CB	GLU	C	156	-28.643	25.038	-22.246	1.00	28.62	6	C	C
ATOM	7305	CG	GLU	C	156	-29.449	26.083	-21.470	1.00	32.66	6	C	C
ATOM	7306	CD	GLU	C	156	-30.377	26.797	-22.453	1.00	36.68	6	C	C
ATOM	7307	OE1	GLU	C	156	-29.889	27.635	-23.229	1.00	38.92	8	C	O
ATOM	7308	OE2	GLU	C	156	-31.593	26.542	-22.467	1.00	38.40	8	C	O
ATOM	7309	N	ILE	C	157	-27.821	21.897	-22.190	1.00	20.89	7	C	N
ATOM	7310	CA	ILE	C	157	-27.270	20.788	-22.957	1.00	21.76	6	C	C
ATOM	7311	C	ILE	C	157	-28.397	20.038	-23.642	1.00	21.18	6	C	C
ATOM	7312	O	ILE	C	157	-29.525	20.030	-23.188	1.00	20.24	8	C	O
ATOM	7313	CB	ILE	C	157	-26.380	19.907	-22.057	1.00	21.13	6	C	C
ATOM	7314	CG1	ILE	C	157	-25.651	18.826	-22.863	1.00	21.25	6	C	C
ATOM	7315	CG2	ILE	C	157	-27.209	19.387	-20.878	1.00	20.03	6	C	C
ATOM	7316	CD1	ILE	C	157	-24.585	18.070	-22.039	1.00	22.04	6	C	C
ATOM	7317	N	ALA	C	158	-28.088	19.428	-24.782	1.00	19.94	7	C	N
ATOM	7318	CA	ALA	C	158	-29.082	18.616	-25.479	1.00	21.40	6	C	C
ATOM	7319	C	ALA	C	158	-28.366	17.579	-26.333	1.00	22.29	6	C	C
ATOM	7320	O	ALA	C	158	-27.181	17.724	-26.600	1.00	23.19	8	C	O
ATOM	7321	CB	ALA	C	158	-29.966	19.478	-26.381	1.00	21.13	6	C	C
ATOM	7322	N	ASN	C	159	-29.151	16.632	-26.839	1.00	22.16	7	C	N
ATOM	7323	CA	ASN	C	159	-28.572	15.647	-27.743	1.00	23.45	6	C	C
ATOM	7324	C	ASN	C	159	-29.642	15.294	-28.774	1.00	23.47	6	C	C
ATOM	7325	O	ASN	C	159	-30.832	15.309	-28.468	1.00	23.16	8	C	O
ATOM	7326	CB	ASN	C	159	-28.087	14.415	-26.972	1.00	22.09	6	C	C
ATOM	7327	CG	ASN	C	159	-29.189	13.432	-26.647	1.00	23.30	6	C	C
ATOM	7328	OD1	ASN	C	159	-29.501	12.523	-27.428	1.00	23.07	8	C	O
ATOM	7329	ND2	ASN	C	159	-29.853	13.541	-25.485	1.00	23.03	7	C	N
ATOM	7330	N	HIS	C	160	-29.247	14.897	-29.960	1.00	22.09	7	C	N
ATOM	7331	CA	HIS	C	160	-30.228	14.503	-30.986	1.00	22.84	6	C	C
ATOM	7332	C	HIS	C	160	-29.507	13.547	-31.918	1.00	22.59	6	C	C
ATOM	7333	O	HIS	C	160	-28.274	13.630	-31.999	1.00	21.19	8	C	O
ATOM	7334	CB	HIS	C	160	-30.788	15.698	-31.745	1.00	19.37	6	C	C
ATOM	7335	CG	HIS	C	160	-29.765	16.575	-32.400	1.00	21.61	6	C	C
ATOM	7336	ND1	HIS	C	160	-29.890	16.987	-33.725	1.00	21.34	7	C	N
ATOM	7337	CD2	HIS	C	160	-28.648	17.188	-31.938	1.00	20.72	6	C	C
ATOM	7338	CE1	HIS	C	160	-28.891	17.794	-34.035	1.00	19.69	6	C	C
ATOM	7339	NE2	HIS	C	160	-28.091	17.914	-32.977	1.00	19.19	7	C	N

94/188

ATOM	7340	N	VAL	C	161	-30.292	12.770	-32.649	1.00	21.23	7	C	N
ATOM	7341	CA	VAL	C	161	-29.744	11.818	-33.579	1.00	22.53	6	C	C
ATOM	7342	C	VAL	C	161	-29.564	12.532	-34.921	1.00	23.06	6	C	C
ATOM	7343	O	VAL	C	161	-30.515	13.173	-35.407	1.00	20.77	8	C	O
ATOM	7344	CB	VAL	C	161	-30.702	10.619	-33.687	1.00	23.82	6	C	C
ATOM	7345	CG1	VAL	C	161	-30.279	9.745	-34.886	1.00	25.63	6	C	C
ATOM	7346	CG2	VAL	C	161	-30.774	9.797	-32.425	1.00	22.64	6	C	C
ATOM	7347	N	VAL	C	162	-28.392	12.416	-35.537	1.00	20.31	7	C	N
ATOM	7348	CA	VAL	C	162	-28.130	13.078	-36.786	1.00	21.83	6	C	C
ATOM	7349	C	VAL	C	162	-27.863	12.104	-37.926	1.00	22.01	6	C	C
ATOM	7350	O	VAL	C	162	-27.944	12.552	-39.059	1.00	20.84	8	C	O
ATOM	7351	CB	VAL	C	162	-26.983	14.113	-36.725	1.00	22.84	6	C	C
ATOM	7352	CG1	VAL	C	162	-27.415	15.226	-35.767	1.00	22.11	6	C	C
ATOM	7353	CG2	VAL	C	162	-25.654	13.468	-36.333	1.00	20.17	6	C	C
ATOM	7354	N	VAL	C	163	-27.663	10.841	-37.574	1.00	19.93	7	C	N
ATOM	7355	CA	VAL	C	163	-27.523	9.760	-38.536	1.00	20.77	6	C	C
ATOM	7356	C	VAL	C	163	-28.112	8.486	-37.894	1.00	21.94	6	C	C
ATOM	7357	O	VAL	C	163	-27.752	8.153	-36.776	1.00	20.49	8	C	O
ATOM	7358	CB	VAL	C	163	-26.079	9.434	-38.905	1.00	21.74	6	C	C
ATOM	7359	CG1	VAL	C	163	-26.088	8.286	-39.925	1.00	20.14	6	C	C
ATOM	7360	CG2	VAL	C	163	-25.344	10.656	-39.452	1.00	20.85	6	C	C
ATOM	7361	N	PHE	C	164	-29.084	7.863	-38.528	1.00	22.28	7	C	N
ATOM	7362	CA	PHE	C	164	-29.761	6.706	-37.955	1.00	21.26	6	C	C
ATOM	7363	C	PHE	C	164	-29.672	5.553	-38.952	1.00	22.88	6	C	C
ATOM	7364	O	PHE	C	164	-30.415	5.455	-39.941	1.00	20.73	8	C	O
ATOM	7365	CB	PHE	C	164	-31.225	6.990	-37.646	1.00	21.22	6	C	C
ATOM	7366	CG	PHE	C	164	-31.761	6.250	-36.449	1.00	19.95	6	C	C
ATOM	7367	CD1	PHE	C	164	-32.538	6.894	-35.514	1.00	19.55	6	C	C
ATOM	7368	CD2	PHE	C	164	-31.434	4.913	-36.239	1.00	18.47	6	C	C
ATOM	7369	CE1	PHE	C	164	-33.034	6.218	-34.406	1.00	19.08	6	C	C
ATOM	7370	CE2	PHE	C	164	-31.902	4.234	-35.132	1.00	21.87	6	C	C
ATOM	7371	CZ	PHE	C	164	-32.717	4.889	-34.194	1.00	20.52	6	C	C
ATOM	7372	N	GLY	C	165	-28.720	4.670	-38.681	1.00	24.55	7	C	N
ATOM	7373	CA	GLY	C	165	-28.498	3.476	-39.511	1.00	24.99	6	C	C
ATOM	7374	C	GLY	C	165	-28.259	3.928	-40.957	1.00	25.74	6	C	C
ATOM	7375	O	GLY	C	165	-28.743	3.288	-41.911	1.00	26.01	8	C	O
ATOM	7376	N	GLY	C	166	-27.478	4.963	-41.103	1.00	24.56	7	C	N
ATOM	7377	CA	GLY	C	166	-27.127	5.466	-42.434	1.00	26.53	6	C	C
ATOM	7378	C	GLY	C	166	-28.061	6.524	-42.993	1.00	26.19	6	C	C
ATOM	7379	O	GLY	C	166	-27.735	7.148	-44.004	1.00	24.90	8	C	O
ATOM	7380	N	LYS	C	167	-29.200	6.776	-42.370	1.00	26.41	7	C	N
ATOM	7381	CA	LYS	C	167	-30.096	7.852	-42.869	1.00	27.07	6	C	C
ATOM	7382	C	LYS	C	167	-29.679	9.175	-42.223	1.00	27.13	6	C	C
ATOM	7383	O	LYS	C	167	-29.854	9.342	-41.004	1.00	27.43	8	C	O
ATOM	7384	CB	LYS	C	167	-31.552	7.468	-42.592	1.00	24.89	6	C	C
ATOM	7385	CG	LYS	C	167	-32.071	6.278	-43.452	1.00	24.24	6	C	C
ATOM	7386	CD	LYS	C	167	-33.390	5.723	-42.901	1.00	27.86	6	C	C
ATOM	7387	CE	LYS	C	167	-33.942	4.569	-43.779	1.00	27.63	6	C	C
ATOM	7388	NZ	LYS	C	167	-34.100	5.018	-45.197	1.00	29.12	7	C	N
ATOM	7389	N	GLU	C	168	-29.122	10.102	-42.981	1.00	27.01	7	C	N
ATOM	7390	CA	GLU	C	168	-28.641	11.362	-42.424	1.00	27.67	6	C	C
ATOM	7391	C	GLU	C	168	-29.821	12.323	-42.273	1.00	30.12	6	C	C
ATOM	7392	O	GLU	C	168	-30.634	12.496	-43.199	1.00	26.40	8	C	O
ATOM	7393	CB	GLU	C	168	-27.519	11.958	-43.256	1.00	29.39	6	C	C
ATOM	7394	CG	GLU	C	168	-26.279	11.096	-43.414	1.00	33.02	6	C	C
ATOM	7395	CD	GLU	C	168	-25.170	11.640	-44.282	1.00	35.88	6	C	C
ATOM	7396	OE1	GLU	C	168	-23.969	11.488	-43.953	1.00	35.60	8	C	O
ATOM	7397	OE2	GLU	C	168	-25.429	12.244	-45.346	1.00	37.81	8	C	O
ATOM	7398	N	ILE	C	169	-29.922	12.908	-41.101	1.00	30.38	7	C	N
ATOM	7399	CA	ILE	C	169	-30.943	13.831	-40.709	1.00	33.08	6	C	C
ATOM	7400	C	ILE	C	169	-30.505	15.251	-41.046	1.00	33.73	6	C	C
ATOM	7401	O	ILE	C	169	-29.426	15.746	-40.839	1.00	34.14	8	C	O
ATOM	7402	CB	ILE	C	169	-31.343	13.794	-39.220	1.00	32.14	6	C	C
ATOM	7403	CG1	ILE	C	169	-31.756	12.405	-38.782	1.00	34.24	6	C	C
ATOM	7404	CG2	ILE	C	169	-32.469	14.791	-38.965	1.00	34.39	6	C	C
ATOM	7405	CD1	ILE	C	169	-32.635	11.617	-39.733	1.00	34.51	6	C	C
ATOM	7406	N	ASP	C	170	-31.449	15.939	-41.641	1.00	33.77	7	C	N
ATOM	7407	CA	ASP	C	170	-31.281	17.279	-42.175	1.00	37.89	6	C	C
ATOM	7408	C	ASP	C	170	-31.623	18.283	-41.093	1.00	36.83	6	C	C
ATOM	7409	O	ASP	C	170	-32.791	18.476	-40.748	1.00	37.44	8	C	O
ATOM	7410	CB	ASP	C	170	-32.136	17.310	-43.462	1.00	41.49	6	C	C
ATOM	7411	CG	AASP	C	170	-31.301	18.100	-44.471	0.50	42.82	6	C	C
ATOM	7412	CG	BASP	C	170	-32.949	16.002	-43.556	0.50	41.57	6	C	C
ATOM	7413	OD2AASP	C	170	-31.867	19.015	-45.098	0.50	43.33	8	C	O	
ATOM	7414	OD2BASP	C	170	-34.097	15.828	-43.121	0.50	40.31	8	C	O	
ATOM	7415	OD1AASP	C	170	-30.093	17.784	-44.592	0.50	43.57	8	C	O	
ATOM	7416	OD1BASP	C	170	-32.360	15.019	-44.077	0.50	43.16	8	C	O	
ATOM	7417	N	VAL	C	171	-30.578	18.789	-40.446	1.00	33.68	7	C	N
ATOM	7418	CA	VAL	C	171	-30.788	19.665	-39.295	1.00	33.67	6	C	C

95/188

ATOM	7419	C	VAL	C	171	-30.871	21.137	-39.671	1.00	35.78	6	C	C
ATOM	7420	O	VAL	C	171	-29.955	21.695	-40.256	1.00	34.38	8	C	O
ATOM	7421	CB	VAL	C	171	-29.688	19.452	-38.240	1.00	32.03	6	C	C
ATOM	7422	CG1	VAL	C	171	-30.070	20.245	-37.005	1.00	32.17	6	C	C
ATOM	7423	CG2	VAL	C	171	-29.496	17.962	-37.955	1.00	29.25	6	C	C
ATOM	7424	N	PRO	C	172	-31.974	21.772	-39.285	1.00	36.86	7	C	N
ATOM	7425	CA	PRO	C	172	-32.184	23.172	-39.559	1.00	38.75	6	C	C
ATOM	7426	C	PRO	C	172	-31.054	24.023	-39.006	1.00	40.49	6	C	C
ATOM	7427	O	PRO	C	172	-30.618	23.842	-37.870	1.00	39.69	8	C	O
ATOM	7428	CB	PRO	C	172	-33.510	23.490	-38.877	1.00	38.08	6	C	C
ATOM	7429	CG	PRO	C	172	-34.187	22.174	-38.761	1.00	38.30	6	C	C
ATOM	7430	CD	PRO	C	172	-33.120	21.150	-38.576	1.00	36.47	6	C	C
ATOM	7431	N	GLU	C	173	-30.528	24.916	-39.830	1.00	42.51	7	C	N
ATOM	7432	CA	GLU	C	173	-29.459	25.802	-39.409	1.00	44.76	6	C	C
ATOM	7433	C	GLU	C	173	-30.003	26.722	-38.309	1.00	43.49	6	C	C
ATOM	7434	O	GLU	C	173	-31.182	26.968	-38.167	1.00	40.37	8	C	O
ATOM	7435	CB	GLU	C	173	-28.869	26.639	-40.529	1.00	48.62	6	C	C
ATOM	7436	CG	GLU	C	173	-28.005	25.906	-41.544	1.00	53.49	6	C	C
ATOM	7437	CD	GLU	C	173	-27.764	26.751	-42.789	1.00	56.24	6	C	C
ATOM	7438	OE1	GLU	C	173	-26.916	27.669	-42.751	1.00	56.89	8	C	O
ATOM	7439	OE2	GLU	C	173	-28.467	26.449	-43.789	1.00	58.38	8	C	O
ATOM	7440	N	ASP	C	174	-29.087	27.140	-37.466	1.00	43.48	7	C	N
ATOM	7441	CA	ASP	C	174	-29.264	28.063	-36.381	1.00	44.41	6	C	C
ATOM	7442	C	ASP	C	174	-30.288	27.816	-35.278	1.00	42.17	6	C	C
ATOM	7443	O	ASP	C	174	-30.957	28.729	-34.768	1.00	39.23	8	C	O
ATOM	7444	CB	ASP	C	174	-29.483	29.475	-37.001	1.00	47.50	6	C	C
ATOM	7445	CG	ASP	C	174	-28.275	29.846	-37.854	1.00	49.99	6	C	C
ATOM	7446	OD1	ASP	C	174	-28.486	30.119	-39.054	1.00	51.89	8	C	O
ATOM	7447	OD2	ASP	C	174	-27.130	29.844	-37.357	1.00	50.79	8	C	O
ATOM	7448	N	LEU	C	175	-30.434	26.570	-34.828	1.00	39.27	7	C	N
ATOM	7449	CA	LEU	C	175	-31.326	26.249	-33.711	1.00	37.73	6	C	C
ATOM	7450	C	LEU	C	175	-30.625	26.522	-32.380	1.00	35.42	6	C	C
ATOM	7451	O	LEU	C	175	-29.400	26.349	-32.346	1.00	36.13	8	C	O
ATOM	7452	CB	LEU	C	175	-31.690	24.769	-33.766	1.00	36.78	6	C	C
ATOM	7453	CG	LEU	C	175	-32.562	24.362	-34.960	1.00	39.35	6	C	C
ATOM	7454	CD1	LEU	C	175	-32.803	22.861	-34.969	1.00	37.46	6	C	C
ATOM	7455	CD2	LEU	C	175	-33.878	25.136	-34.936	1.00	37.38	6	C	C
ATOM	7456	N	THR	C	176	-31.304	26.975	-31.333	1.00	31.73	7	C	N
ATOM	7457	CA	THR	C	176	-30.597	27.126	-30.062	1.00	29.68	6	C	C
ATOM	7458	C	THR	C	176	-30.526	25.759	-29.368	1.00	26.99	6	C	C
ATOM	7459	O	THR	C	176	-31.130	24.799	-29.841	1.00	23.41	8	C	O
ATOM	7460	CB	THR	C	176	-31.292	28.107	-29.093	1.00	28.61	6	C	C
ATOM	7461	OG1	THR	C	176	-32.561	27.549	-28.768	1.00	28.05	8	C	O
ATOM	7462	CG2	THR	C	176	-31.384	29.474	-29.728	1.00	30.41	6	C	C
ATOM	7463	N	VAL	C	177	-29.762	25.645	-28.282	1.00	26.34	7	C	N
ATOM	7464	CA	VAL	C	177	-29.698	24.359	-27.555	1.00	24.30	6	C	C
ATOM	7465	C	VAL	C	177	-31.083	23.985	-27.057	1.00	24.06	6	C	C
ATOM	7466	O	VAL	C	177	-31.560	22.878	-27.108	1.00	23.42	8	C	O
ATOM	7467	CB	VAL	C	177	-28.733	24.484	-26.338	1.00	23.76	6	C	C
ATOM	7468	CG1	VAL	C	177	-28.723	23.191	-25.506	1.00	21.37	6	C	C
ATOM	7469	CG2	VAL	C	177	-27.341	24.739	-26.929	1.00	22.60	6	C	C
ATOM	7470	N	ALA	C	178	-31.781	25.004	-26.520	1.00	26.46	7	C	N
ATOM	7471	CA	ALA	C	178	-33.145	24.855	-26.025	1.00	26.98	6	C	C
ATOM	7472	C	ALA	C	178	-34.080	24.376	-27.126	1.00	26.12	6	C	C
ATOM	7473	O	ALA	C	178	-34.896	23.498	-26.838	1.00	26.84	8	C	O
ATOM	7474	CB	ALA	C	178	-33.664	26.148	-25.400	1.00	26.02	6	C	C
ATOM	7475	N	GLU	C	179	-33.897	24.761	-28.377	1.00	28.17	7	C	N
ATOM	7476	CA	GLU	C	179	-34.828	24.305	-29.429	1.00	29.16	6	C	C
ATOM	7477	C	GLU	C	179	-34.497	22.863	-29.829	1.00	26.73	6	C	C
ATOM	7478	O	GLU	C	179	-35.359	22.029	-30.138	1.00	23.93	8	C	O
ATOM	7479	CB	GLU	C	179	-34.725	25.200	-30.655	1.00	31.25	6	C	C
ATOM	7480	CG	GLU	C	179	-35.391	26.553	-30.571	1.00	34.31	6	C	C
ATOM	7481	CD	GLU	C	179	-34.889	27.584	-31.559	1.00	36.92	6	C	C
ATOM	7482	OE1	GLU	C	179	-33.802	27.549	-32.164	1.00	34.76	8	C	O
ATOM	7483	OE2	GLU	C	179	-35.691	28.556	-31.747	1.00	39.80	8	C	O
ATOM	7484	N	ILE	C	180	-33.197	22.598	-29.791	1.00	25.02	7	C	N
ATOM	7485	CA	ILE	C	180	-32.786	21.203	-30.119	1.00	24.76	6	C	C
ATOM	7486	C	ILE	C	180	-33.354	20.293	-29.051	1.00	23.74	6	C	C
ATOM	7487	O	ILE	C	180	-33.974	19.273	-29.375	1.00	25.51	8	C	O
ATOM	7488	CB	ILE	C	180	-31.262	21.071	-30.150	1.00	25.49	6	C	C
ATOM	7489	CG1	ILE	C	180	-30.746	21.926	-31.314	1.00	26.35	6	C	C
ATOM	7490	CG2	ILE	C	180	-30.847	19.598	-30.264	1.00	22.61	6	C	C
ATOM	7491	CD1	ILE	C	180	-29.309	22.355	-31.074	1.00	29.87	6	C	C
ATOM	7492	N	LYS	C	181	-33.165	20.656	-27.765	1.00	23.31	7	C	N
ATOM	7493	CA	LYS	C	181	-33.778	19.809	-26.728	1.00	26.39	6	C	C
ATOM	7494	C	LYS	C	181	-35.296	19.646	-26.931	1.00	26.02	6	C	C
ATOM	7495	O	LYS	C	181	-35.859	18.555	-26.841	1.00	26.67	8	C	O
ATOM	7496	CB	LYS	C	181	-33.600	20.414	-25.352	1.00	26.37	6	C	C
ATOM	7497	CG	LYS	C	181	-34.064	19.550	-24.199	1.00	28.21	6	C	C

ATOM	7498	CD	LYS	C	181	-33.457	20.175	-22.930	1.00	30.01	6	C	C
ATOM	7499	CE	LYS	C	181	-34.192	19.579	-21.721	1.00	30.34	6	C	C
ATOM	7500	NZ	LYS	C	181	-33.862	18.130	-21.603	1.00	28.78	7	C	N
ATOM	7501	N	GLN	C	182	-35.957	20.745	-27.158	1.00	26.14	7	C	N
ATOM	7502	CA	GLN	C	182	-37.437	20.678	-27.271	1.00	31.33	6	C	C
ATOM	7503	C	GLN	C	182	-37.882	19.866	-28.479	1.00	30.43	6	C	C
ATOM	7504	O	GLN	C	182	-38.751	19.014	-28.293	1.00	29.42	8	C	O
ATOM	7505	CB	GLN	C	182	-38.021	22.090	-27.299	1.00	35.57	6	C	C
ATOM	7506	CG	GLN	C	182	-39.536	22.157	-27.323	1.00	42.87	6	C	C
ATOM	7507	CD	GLN	C	182	-40.114	23.449	-26.785	1.00	48.05	6	C	C
ATOM	7508	OE1	GLN	C	182	-41.344	23.623	-26.676	1.00	50.48	8	C	O
ATOM	7509	NE2	GLN	C	182	-39.275	24.418	-26.400	1.00	50.54	7	C	N
ATOM	7510	N	ARG	C	183	-37.336	20.101	-29.658	1.00	29.72	7	C	N
ATOM	7511	CA	ARG	C	183	-37.762	19.336	-30.826	1.00	30.82	6	C	C
ATOM	7512	C	ARG	C	183	-37.409	17.861	-30.691	1.00	31.33	6	C	C
ATOM	7513	O	ARG	C	183	-38.110	17.012	-31.226	1.00	28.27	8	C	O
ATOM	7514	CB	ARG	C	183	-37.143	19.910	-32.101	1.00	31.31	6	C	C
ATOM	7515	CG	ARG	C	183	-37.468	21.397	-32.274	1.00	34.64	6	C	C
ATOM	7516	CD	ARG	C	183	-37.258	21.773	-33.756	1.00	37.03	6	C	C
ATOM	7517	NE	ARG	C	183	-37.344	23.238	-33.825	1.00	39.86	7	C	N
ATOM	7518	CZ	ARG	C	183	-37.375	23.921	-34.966	1.00	41.39	6	C	C
ATOM	7519	NH1	ARG	C	183	-37.342	23.251	-36.107	1.00	41.14	7	C	N
ATOM	7520	NH2	ARG	C	183	-37.397	25.255	-34.901	1.00	42.74	7	C	N
ATOM	7521	N	ALA	C	184	-36.225	17.575	-30.112	1.00	31.25	7	C	N
ATOM	7522	CA	ALA	C	184	-35.838	16.172	-29.995	1.00	31.52	6	C	C
ATOM	7523	C	ALA	C	184	-36.798	15.433	-29.059	1.00	31.42	6	C	C
ATOM	7524	O	ALA	C	184	-37.073	14.261	-29.305	1.00	30.53	8	C	O
ATOM	7525	CB	ALA	C	184	-34.407	15.992	-29.517	1.00	31.21	6	C	C
ATOM	7526	N	ALA	C	185	-37.254	16.069	-27.996	1.00	30.98	7	C	N
ATOM	7527	CA	ALA	C	185	-38.171	15.393	-27.075	1.00	31.46	6	C	C
ATOM	7528	C	ALA	C	185	-39.528	15.091	-27.705	1.00	33.21	6	C	C
ATOM	7529	O	ALA	C	185	-40.332	14.321	-27.141	1.00	34.08	8	C	O
ATOM	7530	CB	ALA	C	185	-38.318	16.284	-25.830	1.00	31.66	6	C	C
ATOM	7531	N	GLN	C	186	-39.868	15.691	-28.841	1.00	33.69	7	C	N
ATOM	7532	CA	GLN	C	186	-41.125	15.381	-29.501	1.00	38.16	6	C	C
ATOM	7533	C	GLN	C	186	-41.016	14.189	-30.446	1.00	37.69	6	C	C
ATOM	7534	O	GLN	C	186	-41.981	13.866	-31.140	1.00	36.66	8	C	O
ATOM	7535	CB	GLN	C	186	-41.613	16.612	-30.294	1.00	41.49	6	C	C
ATOM	7536	CG	GLN	C	186	-42.207	17.624	-29.302	1.00	46.11	6	C	C
ATOM	7537	CD	GLN	C	186	-42.104	19.049	-29.773	1.00	48.09	6	C	C
ATOM	7538	OE1	GLN	C	186	-41.686	19.322	-30.900	1.00	49.12	8	C	O
ATOM	7539	NE2	GLN	C	186	-42.521	19.972	-28.901	1.00	49.92	7	C	N
ATOM	7540	N	SER	C	187	-39.807	13.619	-30.572	1.00	35.44	7	C	N
ATOM	7541	CA	SER	C	187	-39.602	12.540	-31.543	1.00	30.28	6	C	C
ATOM	7542	C	SER	C	187	-39.359	11.216	-30.627	1.00	30.24	6	C	C
ATOM	7543	O	SER	C	187	-38.717	11.256	-29.785	1.00	28.72	8	C	O
ATOM	7544	CB	SER	C	187	-38.406	12.942	-32.433	1.00	29.22	6	C	C
ATOM	7545	OG	SER	C	187	-38.030	11.836	-33.229	1.00	24.71	8	C	O
ATOM	7546	N	GLU	C	188	-39.817	10.079	-31.324	1.00	27.02	7	C	N
ATOM	7547	CA	GLU	C	188	-39.568	8.804	-30.701	1.00	28.76	6	C	C
ATOM	7548	C	GLU	C	188	-38.178	8.300	-31.038	1.00	26.47	6	C	C
ATOM	7549	O	GLU	C	188	-37.795	7.279	-30.517	1.00	28.10	8	C	O
ATOM	7550	CB	GLU	C	188	-40.589	7.764	-31.236	1.00	31.15	6	C	C
ATOM	7551	CG	GLU	C	188	-41.954	8.015	-30.569	1.00	34.07	6	C	C
ATOM	7552	CD	GLU	C	188	-42.966	7.096	-31.227	1.00	35.85	6	C	C
ATOM	7553	OE1	GLU	C	188	-42.990	5.928	-30.815	1.00	37.15	8	C	O
ATOM	7554	OE2	GLU	C	188	-43.647	7.527	-32.176	1.00	37.44	8	C	O
ATOM	7555	N	VAL	C	189	-37.505	8.999	-31.940	1.00	24.97	7	C	N
ATOM	7556	CA	VAL	C	189	-36.159	8.603	-32.368	1.00	25.04	6	C	C
ATOM	7557	C	VAL	C	189	-35.140	9.710	-32.115	1.00	22.95	6	C	C
ATOM	7558	O	VAL	C	189	-34.063	9.669	-32.690	1.00	22.77	8	C	O
ATOM	7559	CB	VAL	C	189	-36.109	8.206	-33.840	1.00	25.35	6	C	C
ATOM	7560	CG1	VAL	C	189	-36.698	6.809	-34.036	1.00	27.35	6	C	C
ATOM	7561	CG2	VAL	C	189	-36.805	9.179	-34.774	1.00	23.58	6	C	C
ATOM	7562	N	SER	C	190	-35.504	10.713	-31.365	1.00	22.03	7	C	N
ATOM	7563	CA	SER	C	190	-34.721	11.856	-31.019	1.00	23.57	6	C	C
ATOM	7564	C	SER	C	190	-34.217	12.647	-32.205	1.00	23.76	6	C	C
ATOM	7565	O	SER	C	190	-33.085	13.157	-32.083	1.00	21.25	8	C	O
ATOM	7566	CB	SER	C	190	-33.467	11.405	-30.176	1.00	23.95	6	C	C
ATOM	7567	OG	SER	C	190	-33.960	10.876	-28.966	1.00	21.94	8	C	O
ATOM	7568	N	ILE	C	191	-35.042	12.852	-33.255	1.00	22.32	7	C	N
ATOM	7569	CA	ILE	C	191	-34.523	13.655	-34.374	1.00	22.54	6	C	C
ATOM	7570	C	ILE	C	191	-35.192	15.018	-34.299	1.00	24.36	6	C	C
ATOM	7571	O	ILE	C	191	-36.322	15.120	-33.800	1.00	24.35	8	C	O
ATOM	7572	CB	ILE	C	191	-34.701	13.006	-35.738	1.00	23.91	6	C	C
ATOM	7573	CG1	ILE	C	191	-36.174	12.703	-36.000	1.00	24.07	6	C	C
ATOM	7574	CG2	ILE	C	191	-33.848	11.730	-35.784	1.00	26.18	6	C	C
ATOM	7575	CD1	ILE	C	191	-36.485	12.095	-37.340	1.00	21.68	6	C	C
ATOM	7576	N	VAL	C	192	-34.523	16.071	-34.716	1.00	23.84	7	C	N

97/188

ATOM	7577	CA	VAL	C	192	-35.144	17.389	-34.605	1.00	28.15	6	C	C
ATOM	7578	C	VAL	C	192	-36.056	17.724	-35.781	1.00	30.11	6	C	C
ATOM	7579	O	VAL	C	192	-36.795	18.689	-35.689	1.00	30.42	8	C	O
ATOM	7580	CB	VAL	C	192	-34.070	18.469	-34.414	1.00	27.35	6	C	C
ATOM	7581	CG1	VAL	C	192	-33.296	18.230	-33.115	1.00	27.47	6	C	C
ATOM	7582	CG2	VAL	C	192	-33.095	18.461	-35.571	1.00	29.07	6	C	C
ATOM	7583	N	ASN	C	193	-36.006	16.980	-36.848	1.00	33.39	7	C	N
ATOM	7584	CA	ASN	C	193	-36.816	17.188	-38.064	1.00	36.75	6	C	C
ATOM	7585	C	ASN	C	193	-37.705	15.964	-38.169	1.00	38.50	6	C	C
ATOM	7586	O	ASN	C	193	-37.090	14.936	-38.399	1.00	38.40	8	C	O
ATOM	7587	CB	ASN	C	193	-35.913	17.289	-39.266	1.00	36.74	6	C	C
ATOM	7588	CG	ASN	C	193	-36.577	17.177	-40.631	1.00	38.02	6	C	C
ATOM	7589	OD1	ASN	C	193	-37.734	16.826	-40.820	1.00	37.57	8	C	O
ATOM	7590	ND2	ASN	C	193	-35.769	17.430	-41.648	1.00	37.84	7	C	N
ATOM	7591	N	GLN	C	194	-39.005	16.037	-37.977	1.00	44.18	7	C	N
ATOM	7592	CA	GLN	C	194	-39.767	14.786	-38.006	1.00	48.56	6	C	C
ATOM	7593	C	GLN	C	194	-40.152	14.324	-39.394	1.00	50.41	6	C	C
ATOM	7594	O	GLN	C	194	-40.805	13.284	-39.566	1.00	50.37	8	C	O
ATOM	7595	CB	GLN	C	194	-40.975	14.899	-37.077	1.00	50.51	6	C	C
ATOM	7596	CG	GLN	C	194	-40.484	14.955	-35.625	1.00	52.64	6	C	C
ATOM	7597	CD	GLN	C	194	-41.678	14.799	-34.696	1.00	54.19	6	C	C
ATOM	7598	OE1	GLN	C	194	-42.499	13.911	-34.902	1.00	53.45	8	C	O
ATOM	7599	NE2	GLN	C	194	-41.733	15.677	-33.702	1.00	55.53	7	C	N
ATOM	7600	N	GLU	C	195	-39.592	14.981	-40.407	1.00	51.03	7	C	N
ATOM	7601	CA	GLU	C	195	-40.030	14.617	-41.761	1.00	52.57	6	C	C
ATOM	7602	C	GLU	C	195	-39.618	13.203	-42.064	1.00	49.89	6	C	C
ATOM	7603	O	GLU	C	195	-40.384	12.507	-42.748	1.00	49.62	8	C	O
ATOM	7604	CB	GLU	C	195	-39.647	15.708	-42.764	1.00	56.30	6	C	C
ATOM	7605	CG	GLU	C	195	-40.388	16.971	-42.284	1.00	61.16	6	C	C
ATOM	7606	CD	GLU	C	195	-40.240	18.214	-43.114	1.00	63.98	6	C	C
ATOM	7607	OE1	GLU	C	195	-39.156	18.432	-43.698	1.00	65.28	8	C	O
ATOM	7608	OE2	GLU	C	195	-41.212	19.005	-43.191	1.00	66.01	8	C	O
ATOM	7609	N	ARG	C	196	-38.568	12.708	-41.398	1.00	44.70	7	C	N
ATOM	7610	CA	ARG	C	196	-38.200	11.318	-41.597	1.00	39.66	6	C	C
ATOM	7611	C	ARG	C	196	-38.581	10.438	-40.411	1.00	36.09	6	C	C
ATOM	7612	O	ARG	C	196	-38.124	9.288	-40.378	1.00	34.55	8	C	O
ATOM	7613	CB	ARG	C	196	-36.716	11.169	-41.886	1.00	39.54	6	C	C
ATOM	7614	CG	ARG	C	196	-36.263	12.162	-42.968	1.00	40.61	6	C	C
ATOM	7615	CD	ARG	C	196	-35.402	11.419	-43.901	1.00	39.28	6	C	C
ATOM	7616	NE	ARG	C	196	-34.002	11.564	-44.068	1.00	41.76	7	C	N
ATOM	7617	CZ	ARG	C	196	-33.294	10.529	-44.535	1.00	43.38	6	C	C
ATOM	7618	NH1	ARG	C	196	-33.857	9.367	-44.818	1.00	43.09	7	C	N
ATOM	7619	NH2	ARG	C	196	-31.977	10.594	-44.753	1.00	44.55	7	C	N
ATOM	7620	N	GLU	C	197	-39.406	10.976	-39.529	1.00	34.00	7	C	N
ATOM	7621	CA	GLU	C	197	-39.797	10.201	-38.345	1.00	32.72	6	C	C
ATOM	7622	C	GLU	C	197	-40.430	8.866	-38.716	1.00	32.13	6	C	C
ATOM	7623	O	GLU	C	197	-40.000	7.824	-38.213	1.00	31.00	8	C	O
ATOM	7624	CB	GLU	C	197	-40.747	10.959	-37.440	1.00	30.60	6	C	C
ATOM	7625	CG	GLU	C	197	-41.228	10.188	-36.206	1.00	30.49	6	C	C
ATOM	7626	CD	GLU	C	197	-40.467	10.623	-34.973	1.00	29.17	6	C	C
ATOM	7627	OE1	GLU	C	197	-40.845	10.297	-33.832	1.00	27.82	8	C	O
ATOM	7628	OE2	GLU	C	197	-39.487	11.366	-35.194	1.00	27.29	8	C	O
ATOM	7629	N	GLN	C	198	-41.404	8.896	-39.649	1.00	31.72	7	C	N
ATOM	7630	CA	GLN	C	198	-42.115	7.627	-39.897	1.00	31.03	6	C	C
ATOM	7631	C	GLN	C	198	-41.176	6.682	-40.620	1.00	28.69	6	C	C
ATOM	7632	O	GLN	C	198	-41.159	5.478	-40.403	1.00	27.45	8	C	O
ATOM	7633	CB	GLN	C	198	-43.429	7.793	-40.654	1.00	32.42	6	C	C
ATOM	7634	CG	GLN	C	198	-44.214	6.474	-40.710	1.00	34.61	6	C	C
ATOM	7635	CD	GLN	C	198	-44.680	6.046	-39.330	1.00	37.37	6	C	C
ATOM	7636	OE1	GLN	C	198	-45.283	6.841	-38.592	1.00	39.27	8	C	O
ATOM	7637	NE2	GLN	C	198	-44.416	4.821	-38.903	1.00	35.41	7	C	N
ATOM	7638	N	GLU	C	199	-40.414	7.264	-41.529	1.00	28.51	7	C	N
ATOM	7639	CA	GLU	C	199	-39.448	6.512	-42.318	1.00	29.51	6	C	C
ATOM	7640	C	GLU	C	199	-38.405	5.838	-41.418	1.00	29.25	6	C	C
ATOM	7641	O	GLU	C	199	-38.055	4.656	-41.603	1.00	30.47	8	C	O
ATOM	7642	CB	GLU	C	199	-38.726	7.504	-43.252	1.00	30.01	6	C	C
ATOM	7643	CG	GLU	C	199	-37.615	6.853	-44.065	1.00	31.94	6	C	C
ATOM	7644	CD	GLU	C	199	-36.673	7.824	-44.735	1.00	33.43	6	C	C
ATOM	7645	OE1	GLU	C	199	-35.667	7.407	-45.321	1.00	34.68	8	C	O
ATOM	7646	OE2	GLU	C	199	-36.877	9.050	-44.722	1.00	36.68	8	C	O
ATOM	7647	N	ILE	C	200	-37.871	6.616	-40.479	1.00	27.00	7	C	N
ATOM	7648	CA	ILE	C	200	-36.906	5.993	-39.518	1.00	26.15	6	C	C
ATOM	7649	C	ILE	C	200	-37.561	4.853	-38.757	1.00	24.82	6	C	C
ATOM	7650	O	ILE	C	200	-36.996	3.760	-38.647	1.00	24.80	8	C	O
ATOM	7651	CB	ILE	C	200	-36.320	7.010	-38.535	1.00	27.47	6	C	C
ATOM	7652	CG1	ILE	C	200	-35.651	8.203	-39.227	1.00	27.55	6	C	C
ATOM	7653	CG2	ILE	C	200	-35.314	6.378	-37.559	1.00	25.13	6	C	C
ATOM	7654	CD1	ILE	C	200	-34.576	7.850	-40.191	1.00	28.25	6	C	C
ATOM	7655	N	LYS	C	201	-38.787	5.066	-38.248	1.00	25.15	7	C	N

98/188

ATOM	7656	CA	LYS	C	201	-39.508	4.030	-37.493	1.00	27.20	6	C	C
ATOM	7657	C	LYS	C	201	-39.757	2.737	-38.280	1.00	28.55	6	C	C
ATOM	7658	O	LYS	C	201	-39.507	1.610	-37.806	1.00	27.34	8	C	O
ATOM	7659	CB	LYS	C	201	-40.837	4.611	-36.974	1.00	26.34	6	C	C
ATOM	7660	CG	LYS	C	201	-40.628	5.615	-35.846	1.00	30.84	6	C	C
ATOM	7661	CD	LYS	C	201	-41.913	6.082	-35.170	1.00	32.76	6	C	C
ATOM	7662	CE	LYS	C	201	-42.769	4.914	-34.719	1.00	36.54	6	C	C
ATOM	7663	NZ	LYS	C	201	-44.035	5.329	-34.053	1.00	38.16	7	C	N
ATOM	7664	N	ASP	C	202	-40.190	2.918	-39.539	1.00	27.55	7	C	N
ATOM	7665	CA	ASP	C	202	-40.453	1.765	-40.419	1.00	28.89	6	C	C
ATOM	7666	C	ASP	C	202	-39.117	1.094	-40.759	1.00	27.56	6	C	C
ATOM	7667	O	ASP	C	202	-39.029	-0.118	-40.915	1.00	27.15	8	C	O
ATOM	7668	CB	ASP	C	202	-41.124	2.188	-41.728	1.00	29.17	6	C	C
ATOM	7669	CG	ASP	C	202	-42.477	2.835	-41.579	1.00	29.35	6	C	C
ATOM	7670	OD1	ASP	C	202	-43.060	2.824	-40.468	1.00	27.88	8	C	O
ATOM	7671	OD2	ASP	C	202	-42.996	3.396	-42.590	1.00	29.48	8	C	O
ATOM	7672	N	TYR	C	203	-38.083	1.915	-40.852	1.00	28.31	7	C	N
ATOM	7673	CA	TYR	C	203	-36.738	1.334	-41.106	1.00	31.91	6	C	C
ATOM	7674	C	TYR	C	203	-36.363	0.461	-39.916	1.00	30.40	6	C	C
ATOM	7675	O	TYR	C	203	-35.889	-0.658	-40.084	1.00	32.52	8	C	O
ATOM	7676	CB	TYR	C	203	-35.720	2.458	-41.276	1.00	35.36	6	C	C
ATOM	7677	CG	TYR	C	203	-34.297	2.061	-41.584	1.00	37.81	6	C	C
ATOM	7678	CD1	TYR	C	203	-33.235	2.818	-41.081	1.00	39.18	6	C	C
ATOM	7679	CD2	TYR	C	203	-34.001	0.953	-42.350	1.00	39.06	6	C	C
ATOM	7680	CE1	TYR	C	203	-31.928	2.474	-41.374	1.00	40.07	6	C	C
ATOM	7681	CE2	TYR	C	203	-32.703	0.590	-42.643	1.00	40.51	6	C	C
ATOM	7682	CZ	TYR	C	203	-31.672	1.360	-42.148	1.00	40.70	6	C	C
ATOM	7683	OH	TYR	C	203	-30.382	1.038	-42.459	1.00	41.75	8	C	O
ATOM	7684	N	ILE	C	204	-36.597	0.959	-38.685	1.00	27.40	7	C	N
ATOM	7685	CA	ILE	C	204	-36.278	0.151	-37.509	1.00	26.15	6	C	C
ATOM	7686	C	ILE	C	204	-37.014	-1.189	-37.560	1.00	29.21	6	C	C
ATOM	7687	O	ILE	C	204	-36.495	-2.231	-37.139	1.00	26.86	8	C	O
ATOM	7688	CB	ILE	C	204	-36.539	0.954	-36.216	1.00	23.24	6	C	C
ATOM	7689	CG1	ILE	C	204	-35.556	2.151	-36.168	1.00	22.93	6	C	C
ATOM	7690	CG2	ILE	C	204	-36.472	0.122	-34.972	1.00	21.28	6	C	C
ATOM	7691	CD1	ILE	C	204	-35.831	3.181	-35.074	1.00	20.90	6	C	C
ATOM	7692	N	ASP	C	205	-38.326	-1.117	-37.828	1.00	30.15	7	C	N
ATOM	7693	CA	ASP	C	205	-39.159	-2.293	-37.921	1.00	33.88	6	C	C
ATOM	7694	C	ASP	C	205	-38.615	-3.277	-38.962	1.00	33.57	6	C	C
ATOM	7695	O	ASP	C	205	-38.650	-4.437	-38.670	1.00	34.89	8	C	O
ATOM	7696	CB	ASP	C	205	-40.598	-1.974	-38.314	1.00	36.37	6	C	C
ATOM	7697	CG	ASP	C	205	-41.371	-1.250	-37.236	1.00	36.89	6	C	C
ATOM	7698	OD1	ASP	C	205	-42.382	-0.606	-37.590	1.00	39.41	8	C	O
ATOM	7699	OD2	ASP	C	205	-40.940	-1.296	-36.085	1.00	38.31	8	C	O
ATOM	7700	N	GLN	C	206	-38.179	-2.814	-40.099	1.00	36.53	7	C	N
ATOM	7701	CA	GLN	C	206	-37.586	-3.636	-41.155	1.00	40.16	6	C	C
ATOM	7702	C	GLN	C	206	-36.342	-4.377	-40.652	1.00	40.35	6	C	C
ATOM	7703	O	GLN	C	206	-36.156	-5.599	-40.689	1.00	37.53	8	C	O
ATOM	7704	CB	GLN	C	206	-37.204	-2.662	-42.280	1.00	43.35	6	C	C
ATOM	7705	CG	GLN	C	206	-36.881	-3.310	-43.622	1.00	47.58	6	C	C
ATOM	7706	CD	GLN	C	206	-38.152	-3.891	-44.237	1.00	51.32	6	C	C
ATOM	7707	OE1	GLN	C	206	-38.448	-5.067	-43.989	1.00	51.86	8	C	O
ATOM	7708	NE2	GLN	C	206	-38.887	-3.040	-44.959	1.00	51.77	7	C	N
ATOM	7709	N	ILE	C	207	-35.470	-3.561	-40.048	1.00	40.23	7	C	N
ATOM	7710	CA	ILE	C	207	-34.231	-4.071	-39.445	1.00	40.07	6	C	C
ATOM	7711	C	ILE	C	207	-34.556	-5.216	-38.506	1.00	39.88	6	C	C
ATOM	7712	O	ILE	C	207	-33.930	-6.277	-38.502	1.00	39.56	8	C	O
ATOM	7713	CB	ILE	C	207	-33.491	-2.943	-38.692	1.00	39.34	6	C	C
ATOM	7714	CG1	ILE	C	207	-32.883	-1.950	-39.688	1.00	38.49	6	C	C
ATOM	7715	CG2	ILE	C	207	-32.467	-3.496	-37.726	1.00	39.21	6	C	C
ATOM	7716	CD1	ILE	C	207	-31.824	-2.565	-40.592	1.00	38.63	6	C	C
ATOM	7717	N	LYS	C	208	-35.555	-4.989	-37.664	1.00	41.20	7	C	N
ATOM	7718	CA	LYS	C	208	-35.954	-5.996	-36.694	1.00	43.55	6	C	C
ATOM	7719	C	LYS	C	208	-36.493	-7.230	-37.429	1.00	46.10	6	C	C
ATOM	7720	O	LYS	C	208	-36.049	-8.339	-37.138	1.00	45.70	8	C	O
ATOM	7721	CB	LYS	C	208	-36.996	-5.419	-35.754	1.00	44.01	6	C	C
ATOM	7722	CG	LYS	C	208	-37.583	-6.392	-34.763	1.00	45.37	6	C	C
ATOM	7723	CD	LYS	C	208	-38.551	-5.685	-33.814	1.00	47.53	6	C	C
ATOM	7724	CE	LYS	C	208	-39.005	-6.596	-32.682	1.00	47.34	6	C	C
ATOM	7725	NZ	LYS	C	208	-40.268	-6.129	-32.044	1.00	48.26	7	C	N
ATOM	7726	N	ARG	C	209	-37.382	-6.989	-38.415	1.00	47.33	7	C	N
ATOM	7727	CA	ARG	C	209	-37.844	-8.202	-39.107	1.00	50.35	6	C	C
ATOM	7728	C	ARG	C	209	-36.572	-8.813	-39.710	1.00	50.76	6	C	C
ATOM	7729	O	ARG	C	209	-36.262	-9.927	-39.313	1.00	51.34	8	C	O
ATOM	7730	CB	ARG	C	209	-38.989	-8.144	-40.043	1.00	50.06	6	C	C
ATOM	7731	CG	ARG	C	209	-39.233	-7.135	-41.109	1.00	50.21	6	C	C
ATOM	7732	CD	ARG	C	209	-40.764	-6.936	-41.284	1.00	50.72	6	C	C
ATOM	7733	NE	ARG	C	209	-40.906	-5.565	-41.749	1.00	51.94	7	C	N
ATOM	7734	CZ	ARG	C	209	-41.662	-4.594	-41.283	1.00	51.93	6	C	C

99/188

ATOM	7735	NH1	ARG	C	209	-42.497	-4.693	-40.274	1.00	52.51	7	C	N
ATOM	7736	NH2	ARG	C	209	-41.542	-3.441	-41.917	1.00	52.70	7	C	N
ATOM	7737	N	ASP	C	210	-35.849	-8.080	-40.544	1.00	50.19	7	C	N
ATOM	7738	CA	ASP	C	210	-34.641	-8.656	-41.104	1.00	48.81	6	C	C
ATOM	7739	C	ASP	C	210	-33.736	-9.369	-40.121	1.00	46.32	6	C	C
ATOM	7740	O	ASP	C	210	-32.731	-9.929	-40.604	1.00	46.16	8	C	O
ATOM	7741	CB	ASP	C	210	-33.788	-7.611	-41.843	1.00	49.89	6	C	C
ATOM	7742	CG	ASP	C	210	-34.572	-7.191	-43.070	1.00	51.33	6	C	C
ATOM	7743	OD1	ASP	C	210	-34.369	-6.049	-43.519	1.00	52.36	8	C	O
ATOM	7744	OD2	ASP	C	210	-35.401	-8.013	-43.499	1.00	52.42	8	C	O
ATOM	7745	N	GLY	C	211	-33.978	-9.258	-38.835	1.00	43.25	7	C	N
ATOM	7746	CA	GLY	C	211	-33.212	-9.831	-37.775	1.00	40.15	6	C	C
ATOM	7747	C	GLY	C	211	-31.845	-9.237	-37.435	1.00	39.47	6	C	C
ATOM	7748	O	GLY	C	211	-30.939	-9.825	-36.856	1.00	36.62	8	C	O
ATOM	7749	N	ASP	C	212	-31.633	-8.003	-37.853	1.00	37.90	7	C	N
ATOM	7750	CA	ASP	C	212	-30.353	-7.317	-37.768	1.00	34.83	6	C	C
ATOM	7751	C	ASP	C	212	-30.405	-6.179	-36.768	1.00	33.51	6	O	C
ATOM	7752	O	ASP	C	212	-31.368	-6.113	-35.993	1.00	33.29	8	C	O
ATOM	7753	CB	ASP	C	212	-30.139	-6.806	-39.187	1.00	35.65	6	C	C
ATOM	7754	CG	ASP	C	212	-28.663	-6.753	-39.576	1.00	36.85	6	C	C
ATOM	7755	OD1	ASP	C	212	-28.462	-7.022	-40.778	1.00	35.13	8	C	O
ATOM	7756	OD2	ASP	C	212	-27.827	-6.445	-38.700	1.00	34.31	8	C	O
ATOM	7757	N	THR	C	213	-29.404	-5.300	-36.811	1.00	29.37	7	C	N
ATOM	7758	CA	THR	C	213	-29.398	-4.166	-35.855	1.00	25.73	6	C	C
ATOM	7759	C	THR	C	213	-28.810	-2.976	-36.597	1.00	25.15	6	C	C
ATOM	7760	O	THR	C	213	-28.187	-3.142	-37.654	1.00	25.32	8	C	O
ATOM	7761	CB	THR	C	213	-28.576	-4.457	-34.588	1.00	24.39	6	C	C
ATOM	7762	OG1	THR	C	213	-27.209	-4.740	-34.901	1.00	23.61	8	C	O
ATOM	7763	CG2	THR	C	213	-29.089	-5.672	-33.832	1.00	21.71	6	C	C
ATOM	7764	N	ILE	C	214	-28.980	-1.771	-36.052	1.00	25.90	7	C	N
ATOM	7765	CA	ILE	C	214	-28.404	-0.567	-36.640	1.00	24.09	6	C	C
ATOM	7766	C	ILE	C	214	-27.966	0.343	-35.483	1.00	23.90	6	C	C
ATOM	7767	O	ILE	C	214	-28.461	0.358	-34.363	1.00	20.18	8	C	O
ATOM	7768	CB	ILE	C	214	-29.374	0.203	-37.566	1.00	23.72	6	C	C
ATOM	7769	CG1	ILE	C	214	-30.744	0.420	-36.880	1.00	24.50	6	C	C
ATOM	7770	CG2	ILE	C	214	-29.567	-0.544	-38.862	1.00	23.86	6	C	C
ATOM	7771	CD1	ILE	C	214	-31.585	1.518	-37.556	1.00	24.05	6	C	C
ATOM	7772	N	GLY	C	215	-26.965	1.147	-35.789	1.00	23.79	7	C	N
ATOM	7773	CA	GLY	C	215	-26.427	2.146	-34.876	1.00	21.75	6	C	C
ATOM	7774	C	GLY	C	215	-26.715	3.517	-35.474	1.00	21.75	6	C	C
ATOM	7775	O	GLY	C	215	-27.723	3.695	-36.196	1.00	19.76	8	C	O
ATOM	7776	N	GLY	C	216	-25.725	4.414	-35.367	1.00	18.75	7	C	N
ATOM	7777	CA	GLY	C	216	-25.915	5.760	-35.879	1.00	20.06	6	C	C
ATOM	7778	C	GLY	C	216	-24.879	6.735	-35.292	1.00	22.09	6	C	C
ATOM	7779	O	GLY	C	216	-23.849	6.327	-34.708	1.00	20.42	8	C	O
ATOM	7780	N	VAL	C	217	-25.242	7.997	-35.450	1.00	20.73	7	C	N
ATOM	7781	CA	VAL	C	217	-24.411	9.094	-34.976	1.00	20.90	6	C	C
ATOM	7782	C	VAL	C	217	-25.270	10.048	-34.173	1.00	22.49	6	C	C
ATOM	7783	O	VAL	C	217	-26.278	10.576	-34.661	1.00	23.28	8	C	O
ATOM	7784	CB	VAL	C	217	-23.733	9.873	-36.127	1.00	21.47	6	C	C
ATOM	7785	CG1	VAL	C	217	-22.884	11.022	-35.605	1.00	19.27	6	C	C
ATOM	7786	CG2	VAL	C	217	-22.859	8.864	-36.867	1.00	20.32	6	C	C
ATOM	7787	N	VAL	C	218	-24.830	10.290	-32.924	1.00	20.99	7	C	N
ATOM	7788	CA	VAL	C	218	-25.507	11.184	-32.035	1.00	19.74	6	C	C
ATOM	7789	C	VAL	C	218	-24.634	12.414	-31.823	1.00	22.13	6	C	C
ATOM	7790	O	VAL	C	218	-23.421	12.318	-31.839	1.00	19.98	8	C	O
ATOM	7791	CB	VAL	C	218	-25.927	10.510	-30.725	1.00	21.20	6	C	C
ATOM	7792	CG1AVAL	C	218	-25.976	11.415	-29.512	0.50	22.21	6	C	C	
ATOM	7793	CG1BVAL	C	218	-27.078	9.547	-30.976	0.50	20.11	6	C	C	
ATOM	7794	CG2AVAL	C	218	-27.322	9.895	-30.935	0.50	20.07	6	C	C	
ATOM	7795	CG2BVAL	C	218	-24.735	9.840	-30.055	0.50	18.87	6	C	C	
ATOM	7796	N	GLU	C	219	-25.334	13.551	-31.670	1.00	20.05	7	C	N
ATOM	7797	CA	GLU	C	219	-24.661	14.812	-31.488	1.00	19.25	6	C	C
ATOM	7798	C	GLU	C	219	-25.052	15.442	-30.161	1.00	19.29	6	C	C
ATOM	7799	O	GLU	C	219	-26.259	15.578	-29.956	1.00	21.30	8	C	O
ATOM	7800	CB	GLU	C	219	-25.067	15.776	-32.636	1.00	19.46	6	C	C
ATOM	7801	CG	GLU	C	219	-24.403	17.125	-32.497	1.00	22.63	6	C	C
ATOM	7802	CD	GLU	C	219	-24.555	17.992	-33.738	1.00	24.16	6	C	C
ATOM	7803	OE1	GLU	C	219	-25.364	18.920	-33.669	1.00	23.78	8	C	O
ATOM	7804	OE2	GLU	C	219	-23.887	17.830	-34.761	1.00	23.10	8	C	O
ATOM	7805	N	THR	C	220	-24.106	15.929	-29.388	1.00	18.08	7	C	N
ATOM	7806	CA	THR	C	220	-24.441	16.605	-28.116	1.00	20.10	6	C	C
ATOM	7807	C	THR	C	220	-24.029	18.063	-28.272	1.00	17.24	6	C	C
ATOM	7808	O	THR	C	220	-22.927	18.298	-28.828	1.00	19.29	8	C	O
ATOM	7809	CB	THR	C	220	-23.651	15.979	-26.945	1.00	18.56	6	C	C
ATOM	7810	OG1	THR	C	220	-24.100	14.617	-26.746	1.00	18.66	8	C	O
ATOM	7811	CG2	THR	C	220	-23.824	16.711	-25.623	1.00	18.93	6	C	C
ATOM	7812	N	VAL	C	221	-24.853	18.979	-27.820	1.00	16.50	7	C	N
ATOM	7813	CA	VAL	C	221	-24.538	20.412	-27.950	1.00	17.83	6	C	C

100/188

ATOM	7814	C	VAL C 221	-24.559	21.042	-26.566	1.00	18.25	6	C	C
ATOM	7815	O	VAL C 221	-25.522	20.803	-25.827	1.00	19.48	8	C	O
ATOM	7816	CB	VAL C 221	-25.517	21.221	-28.843	1.00	19.32	6	C	C
ATOM	7817	CG1	VAL C 221	-25.021	22.657	-28.983	1.00	21.56	6	C	C
ATOM	7818	CG2	VAL C 221	-25.723	20.570	-30.190	1.00	21.88	6	C	C
ATOM	7819	N	VAL C 222	-23.577	21.844	-26.215	1.00	17.69	7	C	N
ATOM	7820	CA	VAL C 222	-23.627	22.506	-24.897	1.00	19.25	6	C	C
ATOM	7821	C	VAL C 222	-23.585	24.000	-25.102	1.00	20.33	6	C	C
ATOM	7822	O	VAL C 222	-22.708	24.448	-25.861	1.00	19.72	8	C	O
ATOM	7823	CB	VAL C 222	-22.413	22.124	-24.016	1.00	19.28	6	C	C
ATOM	7824	CG1	VAL C 222	-22.615	22.636	-22.593	1.00	19.32	6	C	C
ATOM	7825	CG2	VAL C 222	-22.256	20.611	-24.021	1.00	18.19	6	C	C
ATOM	7826	N	GLY C 223	-24.468	24.752	-24.462	1.00	21.07	7	C	N
ATOM	7827	CA	GLY C 223	-24.413	26.211	-24.704	1.00	20.29	6	C	C
ATOM	7828	C	GLY C 223	-24.063	26.983	-23.442	1.00	22.17	6	C	C
ATOM	7829	O	GLY C 223	-24.239	26.427	-22.355	1.00	22.61	8	C	O
ATOM	7830	N	GLY C 224	-23.664	28.230	-23.630	1.00	21.22	7	C	N
ATOM	7831	CA	GLY C 224	-23.337	29.117	-22.533	1.00	21.81	6	C	C
ATOM	7832	C	GLY C 224	-22.056	28.716	-21.817	1.00	21.43	6	C	C
ATOM	7833	O	GLY C 224	-21.840	29.110	-20.694	1.00	18.74	8	C	O
ATOM	7834	N	VAL C 225	-21.132	28.091	-22.522	1.00	20.28	7	C	N
ATOM	7835	CA	VAL C 225	-19.888	27.576	-21.959	1.00	23.95	6	C	C
ATOM	7836	C	VAL C 225	-18.873	28.654	-21.651	1.00	22.55	6	C	C
ATOM	7837	O	VAL C 225	-18.508	29.429	-22.518	1.00	23.96	8	C	O
ATOM	7838	CB	VAL C 225	-19.393	26.598	-23.072	1.00	26.47	6	C	C
ATOM	7839	CG1	VAL C 225	-17.923	26.276	-23.144	1.00	24.06	6	C	C
ATOM	7840	CG2	VAL C 225	-20.213	25.308	-22.877	1.00	28.19	6	C	C
ATOM	7841	N	PRO C 226	-18.332	28.704	-20.446	1.00	22.93	7	C	N
ATOM	7842	CA	PRO C 226	-17.306	29.664	-20.083	1.00	23.11	6	C	C
ATOM	7843	C	PRO C 226	-16.082	29.438	-20.975	1.00	21.67	6	C	C
ATOM	7844	O	PRO C 226	-15.852	28.329	-21.455	1.00	22.05	8	C	O
ATOM	7845	CB	PRO C 226	-16.997	29.298	-18.629	1.00	23.39	6	C	C
ATOM	7846	CG	PRO C 226	-18.254	28.695	-18.135	1.00	24.65	6	C	C
ATOM	7847	CD	PRO C 226	-18.741	27.853	-19.290	1.00	24.35	6	C	C
ATOM	7848	N	VAL C 227	-15.301	30.453	-21.214	1.00	19.72	7	C	N
ATOM	7849	CA	VAL C 227	-14.128	30.365	-22.045	1.00	20.22	6	C	C
ATOM	7850	C	VAL C 227	-12.875	29.956	-21.281	1.00	19.65	6	C	C
ATOM	7851	O	VAL C 227	-12.684	30.433	-20.169	1.00	18.23	8	C	O
ATOM	7852	CB	VAL C 227	-13.943	31.777	-22.645	1.00	21.05	6	C	C
ATOM	7853	CG1	VAL C 227	-12.603	31.936	-23.337	1.00	22.55	6	C	C
ATOM	7854	CG2	VAL C 227	-15.120	32.068	-23.559	1.00	22.32	6	C	C
ATOM	7855	N	GLY C 228	-11.981	29.162	-21.864	1.00	19.77	7	C	N
ATOM	7856	CA	GLY C 228	-10.715	28.935	-21.150	1.00	20.27	6	C	C
ATOM	7857	C	GLY C 228	-10.815	27.742	-20.192	1.00	19.40	6	C	C
ATOM	7858	O	GLY C 228	-9.884	27.582	-19.406	1.00	19.36	8	C	O
ATOM	7859	N	LEU C 229	-11.793	26.866	-20.375	1.00	18.55	7	C	N
ATOM	7860	CA	LEU C 229	-11.814	25.574	-19.698	1.00	18.75	6	C	C
ATOM	7861	C	LEU C 229	-10.958	24.586	-20.526	1.00	18.04	6	C	C
ATOM	7862	O	LEU C 229	-11.120	24.529	-21.738	1.00	16.80	8	C	O
ATOM	7863	CB	LEU C 229	-13.201	24.979	-19.556	1.00	18.13	6	C	C
ATOM	7864	CG	LEU C 229	-14.161	25.725	-18.610	1.00	19.50	6	C	C
ATOM	7865	CD1	LEU C 229	-15.625	25.515	-18.901	1.00	18.74	6	C	C
ATOM	7866	CD2	LEU C 229	-13.916	25.294	-17.153	1.00	20.33	6	C	C
ATOM	7867	N	GLY C 230	-10.080	23.820	-19.897	1.00	16.74	7	C	N
ATOM	7868	CA	GLY C 230	-9.165	22.953	-20.684	1.00	16.87	6	C	C
ATOM	7869	C	GLY C 230	-7.844	23.754	-20.803	1.00	16.82	6	C	C
ATOM	7870	O	GLY C 230	-7.891	24.946	-20.540	1.00	16.68	8	C	O
ATOM	7871	N	SER C 231	-6.727	23.163	-21.221	1.00	14.56	7	C	N
ATOM	7872	CA	SER C 231	-5.537	23.917	-21.476	1.00	16.58	6	C	C
ATOM	7873	C	SER C 231	-4.686	23.287	-22.562	1.00	14.88	6	C	C
ATOM	7874	O	SER C 231	-4.781	22.053	-22.644	1.00	14.37	8	C	O
ATOM	7875	CB	SER C 231	-4.689	24.050	-20.179	1.00	15.61	6	C	C
ATOM	7876	OG	SER C 231	-3.556	24.823	-20.580	1.00	19.45	8	C	O
ATOM	7877	N	TYR C 232	-3.845	24.009	-23.269	1.00	15.55	7	C	N
ATOM	7878	CA	TYR C 232	-2.930	23.418	-24.268	1.00	16.71	6	C	C
ATOM	7879	C	TYR C 232	-1.569	23.114	-23.656	1.00	17.43	6	C	C
ATOM	7880	O	TYR C 232	-0.693	22.571	-24.363	1.00	19.09	8	C	O
ATOM	7881	CB	TYR C 232	-2.701	24.427	-25.436	1.00	21.90	6	C	C
ATOM	7882	CG	TYR C 232	-2.201	25.757	-24.911	1.00	21.01	6	C	C
ATOM	7883	CD1	TYR C 232	-0.864	25.998	-24.630	1.00	22.87	6	C	C
ATOM	7884	CD2	TYR C 232	-3.131	26.712	-24.548	1.00	23.04	6	C	C
ATOM	7885	CE1	TYR C 232	-0.425	27.195	-24.071	1.00	20.94	6	C	C
ATOM	7886	CE2	TYR C 232	-2.721	27.913	-23.992	1.00	21.72	6	C	C
ATOM	7887	CZ	TYR C 232	-1.383	28.127	-23.763	1.00	20.44	6	C	C
ATOM	7888	OH	TYR C 232	-1.041	29.319	-23.188	1.00	23.87	8	C	O
ATOM	7889	N	VAL C 233	-1.282	23.504	-22.399	1.00	15.64	7	C	N
ATOM	7890	CA	VAL C 233	0.080	23.414	-21.877	1.00	17.13	6	C	C
ATOM	7891	C	VAL C 233	0.613	21.982	-21.719	1.00	17.38	6	C	C
ATOM	7892	O	VAL C 233	1.818	21.734	-21.616	1.00	18.67	8	C	O

101/188

ATOM	7893	CB	VAL	C	233	0.251	24.222	-20.569	1.00	17.77	6	C	C
ATOM	7894	CG1	VAL	C	233	-0.159	25.678	-20.858	1.00	19.04	6	C	C
ATOM	7895	CG2	VAL	C	233	-0.537	23.727	-19.370	1.00	15.98	6	C	C
ATOM	7896	N	GLN	C	234	-0.298	21.017	-21.638	1.00	16.94	7	C	N
ATOM	7897	CA	GLN	C	234	0.085	19.604	-21.599	1.00	15.94	6	C	C
ATOM	7898	C	GLN	C	234	-1.023	18.830	-22.304	1.00	18.22	6	C	C
ATOM	7899	O	GLN	C	234	-2.222	19.194	-22.149	1.00	16.88	8	C	O
ATOM	7900	CB	GLN	C	234	0.362	19.178	-20.153	1.00	16.17	6	C	C
ATOM	7901	CG	GLN	C	234	1.111	17.858	-20.003	1.00	15.25	6	C	C
ATOM	7902	CD	GLN	C	234	2.594	17.924	-20.317	1.00	17.16	6	C	C
ATOM	7903	OE1	GLN	C	234	3.251	16.874	-20.375	1.00	14.62	8	C	O
ATOM	7904	NE2	GLN	C	234	3.127	19.122	-20.490	1.00	12.81	7	C	N
ATOM	7905	N	TRP	C	235	-0.670	17.737	-23.005	1.00	15.25	7	C	N
ATOM	7906	CA	TRP	C	235	-1.696	17.061	-23.815	1.00	17.39	6	C	C
ATOM	7907	C	TRP	C	235	-2.904	16.598	-23.029	1.00	18.42	6	C	C
ATOM	7908	O	TRP	C	235	-4.059	16.642	-23.517	1.00	14.83	8	C	O
ATOM	7909	CB	TRP	C	235	-1.098	15.833	-24.549	1.00	16.96	6	C	C
ATOM	7910	CG	TRP	C	235	-0.701	14.740	-23.569	1.00	18.59	6	C	C
ATOM	7911	CD1	TRP	C	235	0.471	14.696	-22.866	1.00	17.08	6	C	C
ATOM	7912	CD2	TRP	C	235	-1.454	13.583	-23.196	1.00	18.73	6	C	C
ATOM	7913	NE1	TRP	C	235	0.452	13.605	-22.050	1.00	19.02	7	C	N
ATOM	7914	CE2	TRP	C	235	-0.715	12.897	-22.209	1.00	18.39	6	C	C
ATOM	7915	CE3	TRP	C	235	-2.701	13.055	-23.593	1.00	18.20	6	C	C
ATOM	7916	CZ2	TRP	C	235	-1.106	11.667	-21.671	1.00	17.23	6	C	C
ATOM	7917	CZ3	TRP	C	235	-3.146	11.893	-23.006	1.00	19.03	6	C	C
ATOM	7918	CH2	TRP	C	235	-2.351	11.212	-22.024	1.00	19.48	6	C	C
ATOM	7919	N	ASP	C	236	-2.634	16.051	-21.840	1.00	16.82	7	C	N
ATOM	7920	CA	ASP	C	236	-3.745	15.495	-21.060	1.00	18.29	6	C	C
ATOM	7921	C	ASP	C	236	-4.559	16.559	-20.328	1.00	20.07	6	C	C
ATOM	7922	O	ASP	C	236	-5.393	16.211	-19.479	1.00	19.11	8	C	O
ATOM	7923	CB	ASP	C	236	-3.287	14.468	-20.002	1.00	18.78	6	C	C
ATOM	7924	CG	ASP	C	236	-2.205	15.008	-19.115	1.00	20.38	6	C	C
ATOM	7925	OD1	ASP	C	236	-1.793	16.184	-19.170	1.00	20.17	8	C	O
ATOM	7926	OD2	ASP	C	236	-1.675	14.222	-18.288	1.00	23.20	8	C	O
ATOM	7927	N	ARG	C	237	-4.346	17.829	-20.617	1.00	19.35	7	C	N
ATOM	7928	CA	ARG	C	237	-5.183	18.866	-19.996	1.00	18.66	6	C	C
ATOM	7929	C	ARG	C	237	-6.179	19.372	-21.043	1.00	16.82	6	C	C
ATOM	7930	O	ARG	C	237	-6.991	20.265	-20.757	1.00	16.85	8	C	O
ATOM	7931	CB	ARG	C	237	-4.298	20.039	-19.498	1.00	18.68	6	C	C
ATOM	7932	CG	ARG	C	237	-3.534	19.513	-18.271	1.00	20.46	6	C	C
ATOM	7933	CD	ARG	C	237	-2.821	20.477	-17.406	1.00	23.04	6	C	C
ATOM	7934	NE	ARG	C	237	-3.661	21.577	-16.986	1.00	26.25	7	C	N
ATOM	7935	CZ	ARG	C	237	-3.225	22.790	-16.657	1.00	25.82	6	C	C
ATOM	7936	NH1	ARG	C	237	-4.139	23.697	-16.321	1.00	28.11	7	C	N
ATOM	7937	NH2	ARG	C	237	-1.942	23.069	-16.614	1.00	24.22	7	C	N
ATOM	7938	N	LYS	C	238	-6.085	18.875	-22.276	1.00	15.33	7	C	N
ATOM	7939	CA	LYS	C	238	-6.980	19.370	-23.359	1.00	14.28	6	C	C
ATOM	7940	C	LYS	C	238	-8.383	18.886	-23.112	1.00	17.43	6	C	C
ATOM	7941	O	LYS	C	238	-8.651	17.693	-22.927	1.00	15.19	8	C	O
ATOM	7942	CB	LYS	C	238	-6.406	18.946	-24.718	1.00	15.87	6	C	C
ATOM	7943	CG	LYS	C	238	-5.098	19.687	-25.004	1.00	16.72	6	C	C
ATOM	7944	CD	LYS	C	238	-4.481	19.236	-26.355	1.00	18.37	6	C	C
ATOM	7945	CE	LYS	C	238	-3.163	20.084	-26.489	1.00	22.30	6	C	C
ATOM	7946	NZ	LYS	C	238	-2.593	19.855	-27.858	1.00	21.81	7	C	N
ATOM	7947	N	LEU	C	239	-9.381	19.793	-23.151	1.00	18.85	7	C	N
ATOM	7948	CA	LEU	C	239	-10.748	19.356	-22.810	1.00	18.15	6	C	C
ATOM	7949	C	LEU	C	239	-11.437	18.571	-23.924	1.00	18.28	6	C	C
ATOM	7950	O	LEU	C	239	-12.198	17.656	-23.628	1.00	18.33	8	C	O
ATOM	7951	CB	LEU	C	239	-11.628	20.541	-22.423	1.00	16.23	6	C	C
ATOM	7952	CG	LEU	C	239	-13.090	20.239	-22.027	1.00	16.72	6	C	C
ATOM	7953	CD1	LEU	C	239	-13.216	19.199	-20.944	1.00	16.89	6	C	C
ATOM	7954	CD2	LEU	C	239	-13.739	21.587	-21.638	1.00	17.07	6	C	C
ATOM	7955	N	ASP	C	240	-11.122	18.911	-25.177	1.00	18.29	7	C	N
ATOM	7956	CA	ASP	C	240	-11.722	18.119	-26.267	1.00	19.78	6	C	C
ATOM	7957	C	ASP	C	240	-11.258	16.662	-26.081	1.00	18.45	6	C	C
ATOM	7958	O	ASP	C	240	-11.995	15.708	-26.240	1.00	16.96	8	C	O
ATOM	7959	CB	ASP	C	240	-11.357	18.636	-27.650	1.00	19.05	6	C	C
ATOM	7960	CG	ASP	C	240	-9.936	19.017	-27.940	1.00	21.08	6	C	C
ATOM	7961	OD1	ASP	C	240	-9.094	19.039	-26.998	1.00	20.08	8	C	O
ATOM	7962	OD2	ASP	C	240	-9.582	19.301	-29.136	1.00	19.77	8	C	O
ATOM	7963	N	ALA	C	241	-9.993	16.542	-25.726	1.00	16.14	7	C	N
ATOM	7964	CA	ALA	C	241	-9.403	15.195	-25.587	1.00	17.98	6	C	C
ATOM	7965	C	ALA	C	241	-9.994	14.442	-24.416	1.00	17.01	6	C	C
ATOM	7966	O	ALA	C	241	-10.296	13.244	-24.548	1.00	17.68	8	C	O
ATOM	7967	CB	ALA	C	241	-7.902	15.271	-25.520	1.00	18.32	6	C	C
ATOM	7968	N	ARG	C	242	-10.231	15.147	-23.308	1.00	17.57	7	C	N
ATOM	7969	CA	ARG	C	242	-10.890	14.483	-22.182	1.00	18.64	6	C	C
ATOM	7970	C	ARG	C	242	-12.286	14.028	-22.636	1.00	17.42	6	C	C
ATOM	7971	O	ARG	C	242	-12.716	12.941	-22.221	1.00	17.48	8	C	O

102/188

ATOM	7972	CB	ARG	C	242	-10.932	15.431	-20.981	1.00	20.06	6	C	C
ATOM	7973	CG	ARG	C	242	-9.596	15.665	-20.320	1.00	24.25	6	C	C
ATOM	7974	CD	ARG	C	242	-9.556	16.819	-19.287	1.00	25.10	6	C	C
ATOM	7975	NE	ARG	C	242	-8.229	16.728	-18.634	1.00	25.21	7	C	N
ATOM	7976	CZ	ARG	C	242	-7.981	17.385	-17.492	1.00	26.94	6	C	C
ATOM	7977	NH1	ARG	C	242	-8.855	18.178	-16.878	1.00	26.11	7	C	N
ATOM	7978	NH2	ARG	C	242	-6.811	17.274	-16.894	1.00	26.95	7	C	N
ATOM	7979	N	LEU	C	243	-13.057	14.844	-23.369	1.00	16.33	7	C	N
ATOM	7980	CA	LEU	C	243	-14.379	14.434	-23.817	1.00	14.79	6	C	C
ATOM	7981	C	LEU	C	243	-14.293	13.219	-24.739	1.00	16.23	6	C	C
ATOM	7982	O	LEU	C	243	-15.151	12.356	-24.716	1.00	15.76	8	C	O
ATOM	7983	CB	LEU	C	243	-15.102	15.550	-24.612	1.00	14.94	6	C	C
ATOM	7984	CG	LEU	C	243	-15.538	16.674	-23.607	1.00	18.65	6	C	C
ATOM	7985	CD1	LEU	C	243	-15.715	18.005	-24.303	1.00	18.30	6	C	C
ATOM	7986	CD2	LEU	C	243	-16.795	16.243	-22.919	1.00	14.08	6	C	C
ATOM	7987	N	ALA	C	244	-13.238	13.210	-25.557	1.00	16.60	7	C	N
ATOM	7988	CA	ALA	C	244	-13.042	12.113	-26.483	1.00	15.83	6	C	C
ATOM	7989	C	ALA	C	244	-12.977	10.803	-25.731	1.00	18.86	6	C	C
ATOM	7990	O	ALA	C	244	-13.624	9.777	-26.102	1.00	19.25	8	C	O
ATOM	7991	CB	ALA	C	244	-11.859	12.411	-27.406	1.00	16.18	6	C	C
ATOM	7992	N	GLN	C	245	-12.177	10.751	-24.676	1.00	16.16	7	C	N
ATOM	7993	CA	GLN	C	245	-12.086	9.500	-23.926	1.00	17.17	6	C	C
ATOM	7994	C	GLN	C	245	-13.479	9.155	-23.408	1.00	17.42	6	C	C
ATOM	7995	O	GLN	C	245	-13.996	8.037	-23.597	1.00	18.72	8	C	O
ATOM	7996	CB	GLN	C	245	-11.103	9.617	-22.716	1.00	17.31	6	C	C
ATOM	7997	CG	GLN	C	245	-11.208	8.403	-21.814	1.00	18.25	6	C	C
ATOM	7998	CD	GLN	C	245	-10.298	8.456	-20.587	1.00	24.40	6	C	C
ATOM	7999	OE1	GLN	C	245	-9.746	7.421	-20.147	1.00	27.97	8	C	O
ATOM	8000	NE2	GLN	C	245	-10.113	9.610	-19.986	1.00	21.35	7	C	N
ATOM	8001	N	ALA	C	246	-14.148	10.095	-22.750	1.00	15.09	7	C	N
ATOM	8002	CA	ALA	C	246	-15.471	9.778	-22.219	1.00	16.83	6	C	C
ATOM	8003	C	ALA	C	246	-16.493	9.301	-23.251	1.00	18.21	6	C	C
ATOM	8004	O	ALA	C	246	-17.237	8.329	-22.998	1.00	19.58	8	C	O
ATOM	8005	CB	ALA	C	246	-15.981	10.988	-21.417	1.00	15.85	6	C	C
ATOM	8006	N	VAL	C	247	-16.506	9.900	-24.459	1.00	19.33	7	C	N
ATOM	8007	CA	VAL	C	247	-17.497	9.497	-25.462	1.00	19.83	6	C	C
ATOM	8008	C	VAL	C	247	-17.202	8.090	-25.977	1.00	19.24	6	C	C
ATOM	8009	O	VAL	C	247	-18.108	7.267	-26.120	1.00	17.75	8	C	O
ATOM	8010	CB	VAL	C	247	-17.600	10.490	-26.650	1.00	19.36	6	C	C
ATOM	8011	CG1	VAL	C	247	-18.527	9.992	-27.774	1.00	18.32	6	C	C
ATOM	8012	CG2	VAL	C	247	-18.148	11.828	-26.168	1.00	19.27	6	C	C
ATOM	8013	N	VAL	C	248	-15.948	7.812	-26.332	1.00	16.05	7	C	N
ATOM	8014	CA	VAL	C	248	-15.632	6.494	-26.846	1.00	15.69	6	C	C
ATOM	8015	C	VAL	C	248	-15.752	5.455	-25.760	1.00	18.64	6	C	C
ATOM	8016	O	VAL	C	248	-15.942	4.337	-26.193	1.00	16.90	8	C	O
ATOM	8017	CB	VAL	C	248	-14.217	6.499	-27.487	1.00	17.54	6	C	C
ATOM	8018	CG1	VAL	C	248	-13.691	5.102	-27.830	1.00	17.00	6	C	C
ATOM	8019	CG2	VAL	C	248	-14.243	7.388	-28.735	1.00	15.74	6	C	C
ATOM	8020	N	SER	C	249	-15.666	5.793	-24.471	1.00	17.44	7	C	N
ATOM	8021	CA	SER	C	249	-15.907	4.858	-23.401	1.00	19.12	6	C	C
ATOM	8022	C	SER	C	249	-17.364	4.352	-23.327	1.00	20.12	6	C	C
ATOM	8023	O	SER	C	249	-17.613	3.340	-22.639	1.00	18.54	8	C	O
ATOM	8024	CB	SER	C	249	-15.569	5.430	-22.030	1.00	17.76	6	C	C
ATOM	8025	OG	SER	C	249	-16.642	6.270	-21.485	1.00	17.59	8	C	O
ATOM	8026	N	ILE	C	250	-18.266	5.007	-24.061	1.00	19.75	7	C	N
ATOM	8027	CA	ILE	C	250	-19.662	4.515	-24.007	1.00	19.11	6	C	C
ATOM	8028	C	ILE	C	250	-19.757	3.203	-24.767	1.00	18.53	6	C	C
ATOM	8029	O	ILE	C	250	-19.225	3.116	-25.871	1.00	17.34	8	C	O
ATOM	8030	CB	ILE	C	250	-20.672	5.521	-24.591	1.00	18.36	6	C	C
ATOM	8031	CG1	ILE	C	250	-20.599	6.834	-23.792	1.00	20.73	6	C	C
ATOM	8032	CG2	ILE	C	250	-22.080	4.929	-24.503	1.00	16.47	6	C	C
ATOM	8033	CD1	ILE	C	250	-21.192	8.019	-24.557	1.00	21.58	6	C	C
ATOM	8034	N	ASN	C	251	-20.415	2.201	-24.215	1.00	19.41	7	C	N
ATOM	8035	CA	ASN	C	251	-20.638	0.943	-24.919	1.00	19.93	6	C	C
ATOM	8036	C	ASN	C	251	-21.063	1.129	-26.370	1.00	20.76	6	C	C
ATOM	8037	O	ASN	C	251	-22.026	1.867	-26.606	1.00	17.84	8	C	O
ATOM	8038	CB	ASN	C	251	-21.844	0.245	-24.250	1.00	18.29	6	C	C
ATOM	8039	CG	ASN	C	251	-21.428	-0.256	-22.866	1.00	18.65	6	C	C
ATOM	8040	OD1	ASN	C	251	-20.892	0.476	-22.051	1.00	19.92	8	C	O
ATOM	8041	ND2	ASN	C	251	-21.693	-1.512	-22.608	1.00	17.27	7	C	N
ATOM	8042	N	ALA	C	252	-20.331	0.467	-27.284	1.00	20.53	7	C	N
ATOM	8043	CA	ALA	C	252	-20.686	0.453	-28.696	1.00	21.34	6	C	C
ATOM	8044	C	ALA	C	252	-20.215	1.673	-29.452	1.00	22.29	6	C	C
ATOM	8045	O	ALA	C	252	-20.318	1.661	-30.688	1.00	20.42	8	C	O
ATOM	8046	CB	ALA	C	252	-22.175	0.161	-28.966	1.00	19.97	6	C	C
ATOM	8047	N	PHE	C	253	-19.604	2.675	-28.782	1.00	20.69	7	C	N
ATOM	8048	CA	PHE	C	253	-19.097	3.816	-29.525	1.00	19.75	6	C	C
ATOM	8049	C	PHE	C	253	-17.727	3.479	-30.131	1.00	19.72	6	C	C
ATOM	8050	O	PHE	C	253	-16.765	2.946	-29.552	1.00	17.86	8	C	O

103/188

ATOM	8051	CB	PHE	C	253	-19.097	5.124	-28.739	1.00	19.60	6	C	C
ATOM	8052	CG	PHE	C	253	-20.464	5.754	-28.532	1.00	20.55	6	C	C
ATOM	8053	CD1	PHE	C	253	-21.526	5.066	-28.012	1.00	19.27	6	C	C
ATOM	8054	CD2	PHE	C	253	-20.659	7.100	-28.871	1.00	19.89	6	C	C
ATOM	8055	CE1	PHE	C	253	-22.765	5.676	-27.814	1.00	20.54	6	C	C
ATOM	8056	CE2	PHE	C	253	-21.868	7.723	-28.692	1.00	19.60	6	C	C
ATOM	8057	CZ	PHE	C	253	-22.949	7.014	-28.169	1.00	20.90	6	C	C
ATOM	8058	N	LYS	C	254	-17.572	3.817	-31.393	1.00	17.06	7	C	N
ATOM	8059	CA	LYS	C	254	-16.315	3.497	-32.120	1.00	17.32	6	C	C
ATOM	8060	C	LYS	C	254	-15.644	4.750	-32.609	1.00	15.71	6	C	C
ATOM	8061	O	LYS	C	254	-14.708	4.723	-33.425	1.00	17.86	8	C	O
ATOM	8062	CB	LYS	C	254	-16.710	2.566	-33.325	1.00	16.23	6	C	C
ATOM	8063	CG	LYS	C	254	-17.288	1.245	-32.804	1.00	18.56	6	C	C
ATOM	8064	CD	LYS	C	254	-16.310	0.402	-31.971	1.00	17.98	6	C	C
ATOM	8065	CE	LYS	C	254	-15.188	-0.137	-32.844	1.00	17.35	6	C	C
ATOM	8066	NZ	LYS	C	254	-14.309	-1.063	-32.080	1.00	20.90	7	C	N
ATOM	8067	N	GLY	C	255	-16.125	5.910	-32.202	1.00	18.20	7	C	N
ATOM	8068	CA	GLY	C	255	-15.524	7.154	-32.660	1.00	19.14	6	C	C
ATOM	8069	C	GLY	C	255	-16.137	8.400	-32.035	1.00	18.82	6	C	C
ATOM	8070	O	GLY	C	255	-17.276	8.391	-31.560	1.00	18.29	8	C	O
ATOM	8071	N	VAL	C	256	-15.367	9.493	-32.163	1.00	20.02	7	C	N
ATOM	8072	CA	VAL	C	256	-15.857	10.785	-31.652	1.00	17.56	6	C	C
ATOM	8073	C	VAL	C	256	-15.279	11.919	-32.480	1.00	16.76	6	C	C
ATOM	8074	O	VAL	C	256	-14.167	11.792	-33.017	1.00	16.02	8	C	O
ATOM	8075	CB	VAL	C	256	-15.562	10.895	-30.131	1.00	15.73	6	C	C
ATOM	8076	CG1	VAL	C	256	-14.045	10.851	-29.995	1.00	14.81	6	C	C
ATOM	8077	CG2	VAL	C	256	-16.188	12.215	-29.601	1.00	13.91	6	C	C
ATOM	8078	N	GLU	C	257	-15.988	13.036	-32.698	1.00	17.59	7	C	N
ATOM	8079	CA	GLU	C	257	-15.478	14.157	-33.482	1.00	17.58	6	C	C
ATOM	8080	C	GLU	C	257	-16.063	15.472	-32.959	1.00	18.71	6	C	C
ATOM	8081	O	GLU	C	257	-17.144	15.469	-32.358	1.00	19.65	8	C	O
ATOM	8082	CB	GLU	C	257	-15.792	13.996	-34.972	1.00	19.62	6	C	C
ATOM	8083	CG	GLU	C	257	-17.263	14.099	-35.335	1.00	19.72	6	C	C
ATOM	8084	CD	GLU	C	257	-17.603	13.844	-36.802	1.00	22.86	6	C	C
ATOM	8085	OE1	GLU	C	257	-16.755	13.585	-37.682	1.00	22.45	8	C	O
ATOM	8086	OE2	GLU	C	257	-18.834	13.929	-37.074	1.00	23.03	8	C	O
ATOM	8087	N	PHE	C	258	-15.439	16.577	-33.220	1.00	17.33	7	C	N
ATOM	8088	CA	PHE	C	258	-15.822	17.910	-32.807	1.00	17.87	6	C	C
ATOM	8089	C	PHE	C	258	-16.014	18.885	-33.960	1.00	19.11	6	C	C
ATOM	8090	O	PHE	C	258	-15.115	19.069	-34.825	1.00	17.91	8	C	O
ATOM	8091	CB	PHE	C	258	-14.696	18.417	-31.876	1.00	16.57	6	C	C
ATOM	8092	CG	PHE	C	258	-14.498	17.512	-30.677	1.00	19.06	6	C	C
ATOM	8093	CD1	PHE	C	258	-13.642	16.403	-30.723	1.00	19.28	6	C	C
ATOM	8094	CD2	PHE	C	258	-15.152	17.852	-29.483	1.00	19.90	6	C	C
ATOM	8095	CE1	PHE	C	258	-13.474	15.589	-29.612	1.00	19.29	6	C	C
ATOM	8096	CE2	PHE	C	258	-14.943	17.040	-28.358	1.00	20.93	6	C	C
ATOM	8097	CZ	PHE	C	258	-14.158	15.908	-28.430	1.00	19.41	6	C	C
ATOM	8098	N	GLY	C	259	-17.125	19.590	-33.902	1.00	18.69	7	C	N
ATOM	8099	CA	GLY	C	259	-17.428	20.620	-34.932	1.00	20.26	6	C	C
ATOM	8100	C	GLY	C	259	-17.538	19.894	-36.287	1.00	22.42	6	C	C
ATOM	8101	O	GLY	C	259	-18.190	18.852	-36.399	1.00	21.65	8	C	O
ATOM	8102	N	LEU	C	260	-16.834	20.367	-37.290	1.00	22.29	7	C	N
ATOM	8103	CA	LEU	C	260	-16.825	19.681	-38.585	1.00	22.83	6	C	C
ATOM	8104	C	LEU	C	260	-16.304	18.252	-38.421	1.00	21.52	6	C	C
ATOM	8105	O	LEU	C	260	-16.616	17.437	-39.279	1.00	18.56	8	C	O
ATOM	8106	CB	LEU	C	260	-15.953	20.410	-39.598	1.00	22.97	6	C	C
ATOM	8107	CG	LEU	C	260	-16.601	21.578	-40.336	1.00	25.21	6	C	C
ATOM	8108	CD1	LEU	C	260	-15.581	22.228	-41.244	1.00	25.19	6	C	C
ATOM	8109	CD2	LEU	C	260	-17.822	21.110	-41.160	1.00	25.95	6	C	C
ATOM	8110	N	GLY	C	261	-15.385	18.000	-37.473	1.00	18.93	7	C	N
ATOM	8111	CA	GLY	C	261	-14.996	16.603	-37.256	1.00	17.61	6	C	C
ATOM	8112	C	GLY	C	261	-14.194	16.077	-38.456	1.00	19.71	6	C	C
ATOM	8113	O	GLY	C	261	-13.372	16.798	-39.031	1.00	20.54	8	C	O
ATOM	8114	N	PHE	C	262	-14.453	14.839	-38.823	1.00	19.71	7	C	N
ATOM	8115	CA	PHE	C	262	-13.738	14.221	-39.947	1.00	21.92	6	C	C
ATOM	8116	C	PHE	C	262	-13.872	15.034	-41.240	1.00	23.54	6	C	C
ATOM	8117	O	PHE	C	262	-12.933	15.076	-42.066	1.00	22.36	8	C	O
ATOM	8118	CB	PHE	C	262	-14.165	12.764	-40.102	1.00	21.72	6	C	C
ATOM	8119	CG	PHE	C	262	-13.385	11.857	-39.178	1.00	22.98	6	C	C
ATOM	8120	CD1	PHE	C	262	-12.228	11.224	-39.604	1.00	20.49	6	C	C
ATOM	8121	CD2	PHE	C	262	-13.824	11.711	-37.863	1.00	21.50	6	C	C
ATOM	8122	CE1	PHE	C	262	-11.508	10.457	-38.711	1.00	23.51	6	C	C
ATOM	8123	CE2	PHE	C	262	-13.057	10.925	-36.996	1.00	22.79	6	C	C
ATOM	8124	CZ	PHE	C	262	-11.916	10.291	-37.381	1.00	21.34	6	C	C
ATOM	8125	N	GLU	C	263	-14.983	15.734	-41.421	1.00	23.11	7	C	N
ATOM	8126	CA	GLU	C	263	-15.110	16.571	-42.639	1.00	24.35	6	C	C
ATOM	8127	C	GLU	C	263	-14.054	17.646	-42.701	1.00	23.27	6	C	C
ATOM	8128	O	GLU	C	263	-13.663	18.066	-43.813	1.00	20.83	8	C	O
ATOM	8129	CB	GLU	C	263	-16.551	17.104	-42.767	1.00	27.13	6	C	C

104/188

ATOM	8130	CG	GLU	C	263	-16.684	18.054	-43.959	1.00	31.93	6	C	C
ATOM	8131	CD	GLU	C	263	-18.109	18.517	-44.192	1.00	34.86	6	C	C
ATOM	8132	OE1	GLU	C	263	-19.054	17.870	-43.695	1.00	36.46	8	C	O
ATOM	8133	OE2	GLU	C	263	-18.257	19.567	-44.872	1.00	37.25	8	C	O
ATOM	8134	N	ALA	C	264	-13.400	18.006	-41.581	1.00	19.29	7	C	N
ATOM	8135	CA	ALA	C	264	-12.307	18.980	-41.663	1.00	20.84	6	C	C
ATOM	8136	C	ALA	C	264	-11.111	18.396	-42.426	1.00	21.78	6	C	C
ATOM	8137	O	ALA	C	264	-10.298	19.139	-42.974	1.00	22.44	8	C	O
ATOM	8138	CB	ALA	C	264	-11.900	19.445	-40.269	1.00	20.74	6	C	C
ATOM	8139	N	GLY	C	265	-11.016	17.067	-42.493	1.00	21.11	7	C	N
ATOM	8140	CA	GLY	C	265	-9.894	16.505	-43.250	1.00	25.65	6	C	C
ATOM	8141	C	GLY	C	265	-10.191	16.617	-44.765	1.00	27.02	6	C	C
ATOM	8142	O	GLY	C	265	-9.377	16.173	-45.578	1.00	27.32	8	C	O
ATOM	8143	N	TYR	C	266	-11.319	17.178	-45.155	1.00	28.04	7	C	N
ATOM	8144	CA	TYR	C	266	-11.676	17.230	-46.582	1.00	28.15	6	C	C
ATOM	8145	C	TYR	C	266	-11.820	18.664	-47.077	1.00	30.06	6	C	C
ATOM	8146	O	TYR	C	266	-12.128	18.889	-48.263	1.00	28.27	8	C	O
ATOM	8147	CB	TYR	C	266	-12.994	16.466	-46.801	1.00	27.32	6	C	C
ATOM	8148	CG	TYR	C	266	-12.957	14.979	-46.607	1.00	27.64	6	C	C
ATOM	8149	CD1	TYR	C	266	-12.864	14.417	-45.335	1.00	27.92	6	C	C
ATOM	8150	CD2	TYR	C	266	-13.044	14.090	-47.676	1.00	29.14	6	C	C
ATOM	8151	CE1	TYR	C	266	-12.844	13.060	-45.135	1.00	28.08	6	C	C
ATOM	8152	CE2	TYR	C	266	-13.067	12.718	-47.513	1.00	28.61	6	C	C
ATOM	8153	CZ	TYR	C	266	-12.922	12.209	-46.236	1.00	29.30	6	C	C
ATOM	8154	OH	TYR	C	266	-12.975	10.853	-46.004	1.00	30.00	8	C	O
ATOM	8155	N	ARG	C	267	-11.417	19.637	-46.252	1.00	29.42	7	C	N
ATOM	8156	CA	ARG	C	267	-11.599	21.033	-46.638	1.00	31.03	6	C	C
ATOM	8157	C	ARG	C	267	-10.300	21.807	-46.541	1.00	29.49	6	C	C
ATOM	8158	O	ARG	C	267	-9.341	21.273	-45.976	1.00	26.81	8	C	O
ATOM	8159	CB	ARG	C	267	-12.563	21.701	-45.655	1.00	34.85	6	C	C
ATOM	8160	CG	ARG	C	267	-13.979	21.108	-45.647	1.00	40.04	6	C	C
ATOM	8161	CD	ARG	C	267	-14.847	22.315	-45.304	1.00	45.40	6	C	C
ATOM	8162	NE	ARG	C	267	-16.275	22.038	-45.225	1.00	50.20	7	C	N
ATOM	8163	CZ	ARG	C	267	-17.148	22.946	-44.781	1.00	52.68	6	C	C
ATOM	8164	NH1	ARG	C	267	-16.700	24.143	-44.395	1.00	53.13	7	C	N
ATOM	8165	NH2	ARG	C	267	-18.445	22.668	-44.725	1.00	52.93	7	C	N
ATOM	8166	N	LYS	C	268	-10.365	23.060	-46.979	1.00	26.99	7	C	N
ATOM	8167	CA	LYS	C	268	-9.155	23.893	-46.893	1.00	27.86	6	C	C
ATOM	8168	C	LYS	C	268	-9.170	24.722	-45.611	1.00	25.63	6	C	C
ATOM	8169	O	LYS	C	268	-10.258	24.920	-45.070	1.00	23.24	8	C	O
ATOM	8170	CB	LYS	C	268	-9.085	24.804	-48.114	1.00	31.18	6	C	C
ATOM	8171	CG	LYS	C	268	-9.254	23.995	-49.402	1.00	34.98	6	C	C
ATOM	8172	CD	LYS	C	268	-9.941	24.791	-50.498	1.00	39.71	6	C	C
ATOM	8173	CE	LYS	C	268	-8.902	25.473	-51.377	1.00	44.15	6	C	C
ATOM	8174	NZ	LYS	C	268	-9.539	26.332	-52.433	1.00	46.48	7	C	N
ATOM	8175	N	GLY	C	269	-8.020	25.174	-45.154	1.00	23.42	7	C	N
ATOM	8176	CA	GLY	C	269	-7.977	26.006	-43.960	1.00	26.50	6	C	C
ATOM	8177	C	GLY	C	269	-8.977	27.166	-44.039	1.00	28.34	6	C	C
ATOM	8178	O	GLY	C	269	-9.711	27.384	-43.067	1.00	27.22	8	C	O
ATOM	8179	N	SER	C	270	-9.004	27.884	-45.175	1.00	27.56	7	C	N
ATOM	8180	CA	SER	C	270	-9.936	29.005	-45.286	1.00	28.05	6	C	C
ATOM	8181	C	SER	C	270	-11.387	28.594	-45.128	1.00	28.81	6	C	C
ATOM	8182	O	SER	C	270	-12.264	29.420	-44.806	1.00	29.69	8	C	O
ATOM	8183	CB	SER	C	270	-9.721	29.686	-46.674	1.00	27.66	6	C	C
ATOM	8184	OG	SER	C	270	-10.024	28.736	-47.643	1.00	25.27	8	C	O
ATOM	8185	N	GLN	C	271	-11.730	27.320	-45.269	1.00	28.26	7	C	N
ATOM	8186	CA	GLN	C	271	-13.109	26.891	-45.106	1.00	29.78	6	C	C
ATOM	8187	C	GLN	C	271	-13.370	26.233	-43.750	1.00	30.52	6	C	C
ATOM	8188	O	GLN	C	271	-14.464	25.732	-43.474	1.00	26.86	8	C	O
ATOM	8189	CB	GLN	C	271	-13.603	25.961	-46.204	1.00	30.30	6	C	C
ATOM	8190	CG	GLN	C	271	-13.385	26.514	-47.606	1.00	31.21	6	C	C
ATOM	8191	CD	GLN	C	271	-13.212	25.347	-48.576	1.00	32.61	6	C	C
ATOM	8192	OE1	GLN	C	271	-12.651	24.280	-48.270	1.00	32.36	8	C	O
ATOM	8193	NE2	GLN	C	271	-13.756	25.586	-49.747	1.00	31.84	7	C	N
ATOM	8194	N	VAL	C	272	-12.333	26.280	-42.922	1.00	31.93	7	C	N
ATOM	8195	CA	VAL	C	272	-12.476	25.674	-41.594	1.00	29.59	6	C	C
ATOM	8196	C	VAL	C	272	-12.242	26.676	-40.485	1.00	29.86	6	C	C
ATOM	8197	O	VAL	C	272	-13.044	26.517	-39.552	1.00	30.21	8	C	O
ATOM	8198	CB	VAL	C	272	-11.576	24.448	-41.427	1.00	29.56	6	C	C
ATOM	8199	CG1	VAL	C	272	-11.723	23.836	-40.012	1.00	28.94	6	C	C
ATOM	8200	CG2	VAL	C	272	-11.916	23.395	-42.474	1.00	30.48	6	C	C
ATOM	8201	N	MET	C	273	-11.268	27.583	-40.466	1.00	28.54	7	C	N
ATOM	8202	CA	MET	C	273	-11.109	28.391	-39.248	1.00	28.15	6	C	C
ATOM	8203	C	MET	C	273	-12.361	29.237	-38.968	1.00	27.03	6	C	C
ATOM	8204	O	MET	C	273	-13.114	29.545	-39.876	1.00	28.54	8	C	O
ATOM	8205	CB	MET	C	273	-9.884	29.279	-39.194	1.00	28.02	6	C	C
ATOM	8206	CG	MET	C	273	-8.641	28.817	-39.912	1.00	28.74	6	C	C
ATOM	8207	SE	MET	C	273	-8.396	26.836	-38.644	1.00	43.09	34	C	SE
ATOM	8208	CE2	MET	C	273	-8.086	25.297	-40.044	1.00	26.92	6	C	C

105/188

ATOM	8209	N	ASP	C	274	-12.654	29.555	-37.730	1.00	24.22	7	C	N
ATOM	8210	CA	ASP	C	274	-13.785	30.360	-37.360	1.00	22.00	6	C	C
ATOM	8211	C	ASP	C	274	-13.252	31.755	-37.045	1.00	23.76	6	C	C
ATOM	8212	O	ASP	C	274	-12.426	31.962	-36.147	1.00	19.74	8	C	O
ATOM	8213	CB	ASP	C	274	-14.534	29.809	-36.137	1.00	23.07	6	C	C
ATOM	8214	CG	ASP	C	274	-15.085	28.416	-36.476	1.00	22.34	6	C	C
ATOM	8215	OD1	ASP	C	274	-15.604	28.165	-37.603	1.00	20.06	8	C	O
ATOM	8216	OD2	ASP	C	274	-14.926	27.586	-35.550	1.00	21.49	8	C	O
ATOM	8217	N	GLU	C	275	-13.677	32.719	-37.878	1.00	21.36	7	C	N
ATOM	8218	CA	GLU	C	275	-13.112	34.052	-37.695	1.00	23.18	6	C	C
ATOM	8219	C	GLU	C	275	-13.490	34.638	-36.341	1.00	24.05	6	C	C
ATOM	8220	O	GLU	C	275	-14.545	34.352	-35.773	1.00	24.85	8	C	O
ATOM	8221	CB	GLU	C	275	-13.467	34.954	-38.891	1.00	26.17	6	C	C
ATOM	8222	CG	GLU	C	275	-12.824	34.510	-40.206	1.00	26.44	6	C	C
ATOM	8223	CD	GLU	C	275	-13.244	35.434	-41.358	1.00	30.12	6	C	C
ATOM	8224	OE1	GLU	C	275	-12.361	35.809	-42.131	1.00	30.80	8	C	O
ATOM	8225	OE2	GLU	C	275	-14.453	35.751	-41.427	1.00	31.23	8	C	O
ATOM	8226	N	ILE	C	276	-12.653	35.582	-35.891	1.00	22.04	7	C	N
ATOM	8227	CA	ILE	C	276	-12.852	36.183	-34.579	1.00	22.01	6	C	C
ATOM	8228	C	ILE	C	276	-13.533	37.553	-34.704	1.00	22.32	6	C	C
ATOM	8229	O	ILE	C	276	-12.954	38.382	-35.400	1.00	21.84	8	C	O
ATOM	8230	CB	ILE	C	276	-11.510	36.285	-33.839	1.00	21.01	6	C	C
ATOM	8231	CG1	ILE	C	276	-10.920	34.858	-33.629	1.00	21.08	6	C	C
ATOM	8232	CG2	ILE	C	276	-11.593	37.000	-32.503	1.00	20.42	6	C	C
ATOM	8233	CD1	ILE	C	276	-9.474	34.950	-33.132	1.00	21.48	6	C	C
ATOM	8234	N	LEU	C	277	-14.640	37.721	-34.025	1.00	20.80	7	C	N
ATOM	8235	CA	LEU	C	277	-15.396	38.985	-34.019	1.00	26.02	6	C	C
ATOM	8236	C	LEU	C	277	-15.469	39.545	-32.591	1.00	27.57	6	C	C
ATOM	8237	O	LEU	C	277	-15.411	38.804	-31.593	1.00	25.49	8	C	O
ATOM	8238	CB	LEU	C	277	-16.842	38.712	-34.436	1.00	25.52	6	C	C
ATOM	8239	CG	LEU	C	277	-17.055	38.151	-35.851	1.00	27.35	6	C	C
ATOM	8240	CD1	LEU	C	277	-18.484	37.630	-36.041	1.00	26.59	6	C	C
ATOM	8241	CD2	LEU	C	277	-16.655	39.206	-36.871	1.00	27.80	6	C	C
ATOM	8242	N	TRP	C	278	-15.815	40.815	-32.456	1.00	29.35	7	C	N
ATOM	8243	CA	TRP	C	278	-15.873	41.479	-31.159	1.00	30.24	6	C	C
ATOM	8244	C	TRP	C	278	-16.941	42.566	-31.224	1.00	31.79	6	C	C
ATOM	8245	O	TRP	C	278	-17.047	43.220	-32.266	1.00	30.36	8	C	O
ATOM	8246	CB	TRP	C	278	-14.513	42.122	-30.785	1.00	29.13	6	C	C
ATOM	8247	CG	TRP	C	278	-14.553	42.793	-29.440	1.00	30.27	6	C	C
ATOM	8248	CD1	TRP	C	278	-14.258	42.235	-28.224	1.00	31.20	6	C	C
ATOM	8249	CD2	TRP	C	278	-14.928	44.144	-29.146	1.00	29.92	6	C	C
ATOM	8250	NE1	TRP	C	278	-14.446	43.129	-27.208	1.00	29.94	7	C	N
ATOM	8251	CE2	TRP	C	278	-14.827	44.325	-27.757	1.00	30.83	6	C	C
ATOM	8252	CE3	TRP	C	278	-15.355	45.221	-29.934	1.00	31.28	6	C	C
ATOM	8253	CZ2	TRP	C	278	-15.180	45.522	-27.113	1.00	30.22	6	C	C
ATOM	8254	CZ3	TRP	C	278	-15.696	46.408	-29.308	1.00	30.86	6	C	C
ATOM	8255	CH2	TRP	C	278	-15.566	46.556	-27.918	1.00	30.66	6	C	C
ATOM	8256	N	SER	C	279	-17.654	42.809	-30.156	1.00	33.12	7	C	N
ATOM	8257	CA	SER	C	279	-18.683	43.836	-30.118	1.00	36.55	6	C	C
ATOM	8258	C	SER	C	279	-18.691	44.329	-28.670	1.00	38.75	6	C	C
ATOM	8259	O	SER	C	279	-18.404	43.522	-27.787	1.00	36.38	8	C	O
ATOM	8260	CB	SER	C	279	-20.074	43.307	-30.469	1.00	36.17	6	C	C
ATOM	8261	OG	SER	C	279	-20.670	42.638	-29.374	1.00	34.86	8	C	O
ATOM	8262	N	LYS	C	280	-19.051	45.573	-28.453	1.00	42.89	7	C	N
ATOM	8263	CA	LYS	C	280	-19.058	46.121	-27.100	1.00	48.53	6	C	C
ATOM	8264	C	LYS	C	280	-20.120	45.403	-26.279	1.00	49.67	6	C	C
ATOM	8265	O	LYS	C	280	-19.996	45.192	-25.072	1.00	50.41	8	C	O
ATOM	8266	CB	LYS	C	280	-19.329	47.636	-27.122	1.00	52.29	6	C	C
ATOM	8267	CG	LYS	C	280	-20.530	48.032	-27.971	1.00	56.38	6	C	C
ATOM	8268	CD	LYS	C	280	-21.221	49.300	-27.487	1.00	59.29	6	C	C
ATOM	8269	CE	LYS	C	280	-22.274	49.776	-28.486	1.00	61.29	6	C	C
ATOM	8270	NZ	LYS	C	280	-22.975	51.006	-28.003	1.00	62.96	7	C	N
ATOM	8271	N	GLU	C	281	-21.176	44.991	-26.963	1.00	49.83	7	C	N
ATOM	8272	CA	GLU	C	281	-22.318	44.362	-26.314	1.00	51.42	6	C	C
ATOM	8273	C	GLU	C	281	-22.017	42.933	-25.874	1.00	50.64	6	C	C
ATOM	8274	O	GLU	C	281	-22.485	42.530	-24.803	1.00	51.46	8	C	O
ATOM	8275	CB	GLU	C	281	-23.566	44.422	-27.199	1.00	53.14	6	C	C
ATOM	8276	CG	GLU	C	281	-24.011	45.763	-27.725	1.00	55.65	6	C	C
ATOM	8277	CD	GLU	C	281	-23.374	46.273	-28.999	1.00	57.30	6	C	C
ATOM	8278	OE1	GLU	C	281	-22.359	45.706	-29.460	1.00	57.13	8	C	O
ATOM	8279	OE2	GLU	C	281	-23.871	47.275	-29.591	1.00	57.89	8	C	O
ATOM	8280	N	ASP	C	282	-21.269	42.140	-26.623	1.00	48.36	7	C	N
ATOM	8281	CA	ASP	C	282	-21.019	40.761	-26.248	1.00	47.71	6	C	C
ATOM	8282	C	ASP	C	282	-19.560	40.365	-26.058	1.00	44.95	6	C	C
ATOM	8283	O	ASP	C	282	-19.357	39.163	-25.775	1.00	45.39	8	C	O
ATOM	8284	CB	ASP	C	282	-21.549	39.804	-27.327	1.00	49.38	6	C	C
ATOM	8285	CG	ASP	C	282	-22.958	39.980	-27.828	1.00	50.90	6	C	C
ATOM	8286	OD1	ASP	C	282	-23.174	39.872	-29.060	1.00	51.21	8	C	O
ATOM	8287	OD2	ASP	C	282	-23.865	40.221	-27.009	1.00	51.38	8	C	O

106/188

ATOM	8288	N	GLY	C	283	-18.595	41.251	-26.288	1.00	40.78	7	C	N
ATOM	8289	CA	GLY	C	283	-17.190	40.774	-26.158	1.00	35.68	6	C	C
ATOM	8290	C	GLY	C	283	-16.870	39.931	-27.404	1.00	34.04	6	C	C
ATOM	8291	O	GLY	C	283	-17.421	40.213	-28.503	1.00	29.32	8	C	O
ATOM	8292	N	TYR	C	284	-15.927	39.023	-27.255	1.00	29.30	7	C	N
ATOM	8293	CA	TYR	C	284	-15.467	38.188	-28.339	1.00	29.26	6	C	C
ATOM	8294	C	TYR	C	284	-16.423	37.055	-28.669	1.00	28.49	6	C	C
ATOM	8295	O	TYR	C	284	-17.071	36.490	-27.794	1.00	31.42	8	C	O
ATOM	8296	CB	TYR	C	284	-14.087	37.556	-28.123	1.00	26.06	6	C	C
ATOM	8297	CG	TYR	C	284	-12.969	38.571	-28.123	1.00	25.93	6	C	C
ATOM	8298	CD1	TYR	C	284	-12.586	39.198	-26.930	1.00	25.25	6	C	C
ATOM	8299	CD2	TYR	C	284	-12.339	38.938	-29.298	1.00	25.35	6	C	C
ATOM	8300	CE1	TYR	C	284	-11.589	40.149	-26.960	1.00	25.31	6	C	C
ATOM	8301	CE2	TYR	C	284	-11.353	39.904	-29.325	1.00	24.54	6	C	C
ATOM	8302	CZ	TYR	C	284	-10.956	40.482	-28.137	1.00	24.52	6	C	C
ATOM	8303	OH	TYR	C	284	-9.934	41.401	-28.146	1.00	23.92	8	C	O
ATOM	8304	N	THR	C	285	-16.587	36.823	-29.962	1.00	28.00	7	C	N
ATOM	8305	CA	THR	C	285	-17.398	35.692	-30.433	1.00	26.23	6	C	C
ATOM	8306	C	THR	C	285	-16.705	35.123	-31.661	1.00	24.48	6	C	C
ATOM	8307	O	THR	C	285	-15.542	35.498	-31.849	1.00	22.68	8	C	O
ATOM	8308	CB	THR	C	285	-18.845	36.076	-30.750	1.00	29.97	6	C	C
ATOM	8309	OG1	THR	C	285	-18.871	37.073	-31.810	1.00	29.06	8	C	O
ATOM	8310	CG2	THR	C	285	-19.423	36.687	-29.485	1.00	30.60	6	C	C
ATOM	8311	N	ARG	C	286	-17.329	34.216	-32.397	1.00	22.32	7	C	N
ATOM	8312	CA	ARG	C	286	-16.745	33.605	-33.586	1.00	23.60	6	C	C
ATOM	8313	C	ARG	C	286	-17.796	33.699	-34.731	1.00	24.35	6	C	C
ATOM	8314	O	ARG	C	286	-18.979	33.677	-34.412	1.00	23.23	8	C	O
ATOM	8315	CB	ARG	C	286	-16.331	32.167	-33.404	1.00	22.91	6	C	C
ATOM	8316	CG	ARG	C	286	-15.252	31.869	-32.352	1.00	21.60	6	C	C
ATOM	8317	CD	ARG	C	286	-13.924	32.540	-32.676	1.00	19.58	6	C	C
ATOM	8318	NE	ARG	C	286	-12.926	32.264	-31.618	1.00	18.68	7	C	N
ATOM	8319	CZ	ARG	C	286	-12.842	32.919	-30.484	1.00	20.01	6	C	C
ATOM	8320	NH1	ARG	C	286	-13.646	33.933	-30.183	1.00	19.24	7	C	N
ATOM	8321	NH2	ARG	C	286	-11.961	32.575	-29.551	1.00	20.28	7	C	N
ATOM	8322	N	ARG	C	287	-17.360	33.934	-35.971	1.00	24.98	7	C	N
ATOM	8323	CA	ARG	C	287	-18.373	34.084	-37.037	1.00	26.36	6	C	C
ATOM	8324	C	ARG	C	287	-19.101	32.770	-37.297	1.00	26.10	6	C	C
ATOM	8325	O	ARG	C	287	-20.303	32.742	-37.624	1.00	23.72	8	C	O
ATOM	8326	CB	ARG	C	287	-17.732	34.634	-38.304	1.00	27.72	6	C	C
ATOM	8327	CG	AARG	C	287	-18.810	34.840	-39.390	0.50	29.39	6	C	C
ATOM	8328	CG	BARG	C	287	-18.623	35.293	-39.349	0.50	28.19	6	C	C
ATOM	8329	CD	AARG	C	287	-18.206	35.385	-40.671	0.50	31.34	6	C	C
ATOM	8330	CD	BARG	C	287	-17.872	35.534	-40.653	0.50	28.40	6	C	C
ATOM	8331	NE	AARG	C	287	-17.398	34.429	-41.399	0.50	32.63	7	C	N
ATOM	8332	NE	BARG	C	287	-16.793	36.491	-40.647	0.50	27.83	7	C	N
ATOM	8333	CZ	AARG	C	287	-17.797	33.519	-42.271	0.50	34.43	6	C	C
ATOM	8334	CZ	BARG	C	287	-16.865	37.810	-40.491	0.50	29.14	6	C	C
ATOM	8335	NH1AARG	C	287	-16.898	32.731	-42.867	0.50	35.45	7	C	N	
ATOM	8336	NH1BARG	C	287	-15.776	38.580	-40.521	0.50	26.55	7	C	N	
ATOM	8337	NH2AARG	C	287	-19.078	33.355	-42.605	0.50	34.74	7	C	N	
ATOM	8338	NH2BARG	C	287	-18.074	38.355	-40.322	0.50	29.55	7	C	N	
ATOM	8339	N	THR	C	288	-18.353	31.651	-37.195	1.00	21.68	7	C	N
ATOM	8340	CA	THR	C	288	-18.894	30.342	-37.517	1.00	21.63	6	C	C
ATOM	8341	C	THR	C	288	-18.474	29.377	-36.387	1.00	20.77	6	C	C
ATOM	8342	O	THR	C	288	-17.679	29.794	-35.549	1.00	19.39	8	C	O
ATOM	8343	CB	THR	C	288	-18.381	29.722	-38.828	1.00	22.80	6	C	C
ATOM	8344	OG1	THR	C	288	-16.961	29.947	-38.839	1.00	23.71	8	C	O
ATOM	8345	CG2	THR	C	288	-18.963	30.390	-40.107	1.00	23.46	6	C	C
ATOM	8346	N	ASN	C	289	-18.953	28.140	-36.413	1.00	20.64	7	C	N
ATOM	8347	CA	ASN	C	289	-18.560	27.217	-35.355	1.00	21.11	6	C	C
ATOM	8348	C	ASN	C	289	-18.082	25.905	-35.915	1.00	19.31	6	C	C
ATOM	8349	O	ASN	C	289	-18.381	24.848	-35.395	1.00	19.24	8	C	O
ATOM	8350	CB	ASN	C	289	-19.632	27.138	-34.246	1.00	21.12	6	C	C
ATOM	8351	CG	ASN	C	289	-19.145	26.377	-33.016	1.00	22.42	6	C	C
ATOM	8352	OD1	ASN	C	289	-17.953	26.325	-32.664	1.00	22.33	8	C	O
ATOM	8353	ND2	ASN	C	289	-20.058	25.731	-32.295	1.00	21.62	7	C	N
ATOM	8354	N	ASN	C	290	-17.278	25.944	-36.997	1.00	20.11	7	C	N
ATOM	8355	CA	ASN	C	290	-16.679	24.753	-37.562	1.00	20.67	6	C	C
ATOM	8356	C	ASN	C	290	-15.831	23.990	-36.537	1.00	20.66	6	C	C
ATOM	8357	O	ASN	C	290	-15.658	22.777	-36.706	1.00	19.43	8	C	O
ATOM	8358	CB	ASN	C	290	-15.773	25.117	-38.772	1.00	21.42	6	C	C
ATOM	8359	CG	ASN	C	290	-16.615	25.840	-39.824	1.00	24.94	6	C	C
ATOM	8360	OD1	ASN	C	290	-17.645	25.323	-40.199	1.00	24.53	8	C	O
ATOM	8361	ND2	ASN	C	290	-16.258	26.992	-40.358	1.00	26.00	7	C	N
ATOM	8362	N	LEU	C	291	-15.217	24.689	-35.572	1.00	19.84	7	C	N
ATOM	8363	CA	LEU	C	291	-14.365	24.017	-34.595	1.00	18.81	6	C	C
ATOM	8364	C	LEU	C	291	-15.094	23.425	-33.409	1.00	18.77	6	C	C
ATOM	8365	O	LEU	C	291	-14.425	22.866	-32.504	1.00	20.01	8	C	O
ATOM	8366	CB	LEU	C	291	-13.261	24.979	-34.065	1.00	16.79	6	C	C

107/188

ATOM	8367	CG	LEU	C	291	-12.436	25.534	-35.236	1.00	18.18	6	C	C
ATOM	8368	CD1	LEU	C	291	-11.409	26.560	-34.769	1.00	20.87	6	C	C
ATOM	8369	CD2	LEU	C	291	-11.732	24.417	-36.000	1.00	19.26	6	C	C
ATOM	8370	N	GLY	C	292	-16.401	23.614	-33.401	1.00	16.79	7	C	N
ATOM	8371	CA	GLY	C	292	-17.226	22.993	-32.360	1.00	15.92	6	C	C
ATOM	8372	C	GLY	C	292	-16.856	23.383	-30.945	1.00	18.65	6	C	C
ATOM	8373	O	GLY	C	292	-17.057	22.582	-30.023	1.00	15.83	8	C	O
ATOM	8374	N	GLY	C	293	-16.514	24.670	-30.754	1.00	16.63	7	C	N
ATOM	8375	CA	GLY	C	293	-16.338	25.166	-29.403	1.00	18.38	6	C	C
ATOM	8376	C	GLY	C	293	-14.938	25.039	-28.832	1.00	19.91	6	C	C
ATOM	8377	O	GLY	C	293	-14.795	25.470	-27.684	1.00	19.08	8	C	O
ATOM	8378	N	PHE	C	294	-13.992	24.520	-29.608	1.00	18.93	7	C	N
ATOM	8379	CA	PHE	C	294	-12.652	24.280	-29.077	1.00	18.91	6	C	C
ATOM	8380	C	PHE	C	294	-11.532	24.859	-29.941	1.00	18.84	6	C	C
ATOM	8381	O	PHE	C	294	-11.529	24.734	-31.159	1.00	17.66	8	C	O
ATOM	8382	CB	PHE	C	294	-12.390	22.747	-28.986	1.00	18.18	6	C	C
ATOM	8383	CG	PHE	C	294	-13.141	22.153	-27.825	1.00	19.09	6	C	C
ATOM	8384	CD1	PHE	C	294	-14.325	21.449	-28.017	1.00	17.72	6	C	C
ATOM	8385	CD2	PHE	C	294	-12.665	22.358	-26.536	1.00	19.93	6	C	C
ATOM	8386	CE1	PHE	C	294	-14.968	20.939	-26.917	1.00	19.71	6	C	C
ATOM	8387	CE2	PHE	C	294	-13.330	21.833	-25.438	1.00	20.26	6	C	C
ATOM	8388	CZ	PHE	C	294	-14.524	21.170	-25.611	1.00	16.88	6	C	C
ATOM	8389	N	GLU	C	295	-10.618	25.563	-29.291	1.00	18.00	7	C	N
ATOM	8390	CA	GLU	C	295	-9.392	26.075	-29.870	1.00	17.69	6	C	C
ATOM	8391	C	GLU	C	295	-8.269	25.666	-28.904	1.00	17.65	6	C	C
ATOM	8392	O	GLU	C	295	-8.333	26.059	-27.721	1.00	17.29	8	C	O
ATOM	8393	CB	GLU	C	295	-9.373	27.593	-30.053	1.00	21.90	6	C	C
ATOM	8394	CG	GLU	C	295	-10.408	28.090	-31.063	1.00	19.62	6	C	C
ATOM	8395	CD	GLU	C	295	-10.807	29.550	-30.952	1.00	22.21	6	C	C
ATOM	8396	OE1	GLU	C	295	-10.279	30.365	-30.178	1.00	22.21	8	C	O
ATOM	8397	OE2	GLU	C	295	-11.698	29.957	-31.747	1.00	20.78	8	C	O
ATOM	8398	N	GLY	C	296	-7.228	24.973	-29.358	1.00	18.70	7	C	N
ATOM	8399	CA	GLY	C	296	-6.111	24.757	-28.411	1.00	18.15	6	C	C
ATOM	8400	C	GLY	C	296	-6.490	23.892	-27.203	1.00	18.59	6	C	C
ATOM	8401	O	GLY	C	296	-5.819	23.944	-26.160	1.00	15.33	8	C	O
ATOM	8402	N	GLY	C	297	-7.518	23.063	-27.374	1.00	19.37	7	C	N
ATOM	8403	CA	GLY	C	297	-7.900	22.167	-26.275	1.00	22.54	6	C	C
ATOM	8404	C	GLY	C	297	-8.719	22.913	-25.220	1.00	21.92	6	C	C
ATOM	8405	O	GLY	C	297	-9.073	22.359	-24.164	1.00	21.63	8	C	O
ATOM	8406	N	MET	C	298	-9.095	24.150	-25.543	1.00	21.15	7	C	N
ATOM	8407	CA	MET	C	298	-9.843	24.988	-24.593	1.00	20.15	6	C	C
ATOM	8408	C	MET	C	298	-11.194	25.462	-25.139	1.00	20.54	6	C	C
ATOM	8409	O	MET	C	298	-11.300	25.720	-26.334	1.00	17.79	8	C	O
ATOM	8410	CB	MET	C	298	-8.967	26.233	-24.346	1.00	16.81	6	C	C
ATOM	8411	CG	MET	C	298	-7.587	25.898	-23.736	1.00	16.15	6	C	C
ATOM	8412	SE	MET	C	298	-6.589	27.570	-23.544	1.00	35.26	34	C	SE
ATOM	8413	CE2	MET	C	298	-6.538	27.894	-25.488	1.00	13.85	6	C	C
ATOM	8414	N	THR	C	299	-12.209	25.681	-24.312	1.00	18.69	7	C	N
ATOM	8415	CA	THR	C	299	-13.497	26.178	-24.802	1.00	19.01	6	C	C
ATOM	8416	C	THR	C	299	-13.376	27.612	-25.286	1.00	19.68	6	C	C
ATOM	8417	O	THR	C	299	-12.720	28.387	-24.578	1.00	20.37	8	C	O
ATOM	8418	CB	THR	C	299	-14.551	26.139	-23.667	1.00	18.53	6	C	C
ATOM	8419	OG1	THR	C	299	-14.001	26.808	-22.520	1.00	16.61	8	C	O
ATOM	8420	CG2	THR	C	299	-14.826	24.697	-23.343	1.00	14.56	6	C	C
ATOM	8421	N	ASN	C	300	-13.882	27.895	-26.503	1.00	17.37	7	C	N
ATOM	8422	CA	ASN	C	300	-13.811	29.284	-26.963	1.00	18.37	6	C	C
ATOM	8423	C	ASN	C	300	-15.080	30.078	-26.702	1.00	19.99	6	C	C
ATOM	8424	O	ASN	C	300	-15.169	31.237	-27.118	1.00	21.06	8	C	O
ATOM	8425	CB	ASN	C	300	-13.427	29.269	-28.456	1.00	18.21	6	C	C
ATOM	8426	CG	ASN	C	300	-14.503	28.677	-29.332	1.00	18.30	6	C	C
ATOM	8427	OD1	ASN	C	300	-15.655	28.394	-28.955	1.00	18.63	8	C	O
ATOM	8428	ND2	ASN	C	300	-14.148	28.495	-30.592	1.00	17.69	7	C	N
ATOM	8429	N	GLY	C	301	-16.105	29.543	-26.028	1.00	20.60	7	C	N
ATOM	8430	CA	GLY	C	301	-17.304	30.362	-25.773	1.00	20.47	6	C	C
ATOM	8431	C	GLY	C	301	-18.405	30.033	-26.796	1.00	21.22	6	C	C
ATOM	8432	O	GLY	C	301	-19.561	30.260	-26.474	1.00	20.85	8	C	O
ATOM	8433	N	GLN	C	302	-18.040	29.405	-27.891	1.00	19.63	7	C	N
ATOM	8434	CA	GLN	C	302	-19.078	28.978	-28.860	1.00	21.14	6	C	C
ATOM	8435	C	GLN	C	302	-19.678	27.693	-28.329	1.00	22.13	6	C	C
ATOM	8436	O	GLN	C	302	-19.070	27.053	-27.455	1.00	20.19	8	C	O
ATOM	8437	CB	GLN	C	302	-18.436	28.727	-30.213	1.00	20.31	6	C	C
ATOM	8438	CG	GLN	C	302	-17.878	29.957	-30.911	1.00	25.39	6	C	C
ATOM	8439	CD	GLN	C	302	-19.045	30.893	-31.267	1.00	25.49	6	C	C
ATOM	8440	OE1	GLN	C	302	-20.004	30.465	-31.900	1.00	26.77	8	C	O
ATOM	8441	NE2	GLN	C	302	-19.030	32.075	-30.698	1.00	27.10	7	C	N
ATOM	8442	N	PRO	C	303	-20.820	27.283	-28.862	1.00	23.28	7	C	N
ATOM	8443	CA	PRO	C	303	-21.428	26.046	-28.405	1.00	23.55	6	C	C
ATOM	8444	C	PRO	C	303	-20.463	24.895	-28.638	1.00	20.89	6	C	C
ATOM	8445	O	PRO	C	303	-19.743	24.874	-29.662	1.00	18.66	8	C	O

108/188

ATOM	8446	CB	PRO	C	303	-22.662	25.907	-29.328	1.00	24.27	6	C	C
ATOM	8447	CG	PRO	C	303	-23.053	27.368	-29.475	1.00	23.40	6	C	C
ATOM	8448	CD	PRO	C	303	-21.701	28.016	-29.807	1.00	24.25	6	C	C
ATOM	8449	N	ILE	C	304	-20.426	23.992	-27.649	1.00	20.76	7	C	N
ATOM	8450	CA	ILE	C	304	-19.570	22.815	-27.826	1.00	18.04	6	C	C
ATOM	8451	C	ILE	C	304	-20.432	21.890	-28.704	1.00	19.76	6	C	C
ATOM	8452	O	ILE	C	304	-21.563	21.645	-28.296	1.00	17.97	8	C	O
ATOM	8453	CB	ILE	C	304	-19.245	22.111	-26.508	1.00	19.51	6	C	C
ATOM	8454	CG1	ILE	C	304	-18.207	22.916	-25.707	1.00	17.63	6	C	C
ATOM	8455	CG2	ILE	C	304	-18.781	20.684	-26.801	1.00	15.83	6	C	C
ATOM	8456	CD1	ILE	C	304	-18.157	22.474	-24.252	1.00	19.68	6	C	C
ATOM	8457	N	VAL	C	305	-19.862	21.351	-29.752	1.00	17.67	7	C	N
ATOM	8458	CA	VAL	C	305	-20.623	20.463	-30.654	1.00	19.65	6	C	C
ATOM	8459	C	VAL	C	305	-19.813	19.169	-30.808	1.00	19.03	6	C	C
ATOM	8460	O	VAL	C	305	-18.729	19.217	-31.407	1.00	20.57	8	C	O
ATOM	8461	CB	VAL	C	305	-20.821	21.131	-32.007	1.00	20.16	6	C	C
ATOM	8462	CG1	VAL	C	305	-21.411	20.203	-33.065	1.00	21.33	6	C	C
ATOM	8463	CG2	VAL	C	305	-21.720	22.375	-31.842	1.00	18.41	6	C	C
ATOM	8464	N	VAL	C	306	-20.347	18.084	-30.259	1.00	17.05	7	C	N
ATOM	8465	CA	VAL	C	306	-19.565	16.846	-30.351	1.00	17.96	6	C	C
ATOM	8466	C	VAL	C	306	-20.406	15.706	-30.852	1.00	19.39	6	C	C
ATOM	8467	O	VAL	C	306	-21.607	15.662	-30.550	1.00	18.86	8	C	O
ATOM	8468	CB	VAL	C	306	-18.837	16.609	-29.020	1.00	17.71	6	C	C
ATOM	8469	CG1	VAL	C	306	-19.799	16.591	-27.833	1.00	19.91	6	C	C
ATOM	8470	CG2	VAL	C	306	-18.108	15.250	-29.029	1.00	17.07	6	C	C
ATOM	8471	N	ARG	C	307	-19.827	14.817	-31.682	1.00	19.45	7	C	N
ATOM	8472	CA	ARG	C	307	-20.655	13.708	-32.163	1.00	20.03	6	C	C
ATOM	8473	C	ARG	C	307	-19.905	12.417	-31.838	1.00	18.25	6	C	C
ATOM	8474	O	ARG	C	307	-18.671	12.415	-31.862	1.00	20.21	8	C	O
ATOM	8475	CB	ARG	C	307	-20.981	13.721	-33.671	1.00	23.04	6	C	C
ATOM	8476	CG	ARG	C	307	-21.701	14.954	-34.151	1.00	25.73	6	C	C
ATOM	8477	CD	ARG	C	307	-22.154	14.996	-35.610	1.00	27.95	6	C	C
ATOM	8478	NE	ARG	C	307	-20.967	15.345	-36.382	1.00	33.02	7	C	N
ATOM	8479	CZ	ARG	C	307	-20.615	16.635	-36.521	1.00	32.29	6	C	C
ATOM	8480	NH1	ARG	C	307	-21.343	17.604	-35.998	1.00	32.17	7	C	N
ATOM	8481	NH2	ARG	C	307	-19.531	16.861	-37.206	1.00	32.52	7	C	N
ATOM	8482	N	GLY	C	308	-20.645	11.393	-31.578	1.00	17.19	7	C	N
ATOM	8483	CA	GLY	C	308	-20.128	10.025	-31.383	1.00	14.13	6	C	C
ATOM	8484	C	GLY	C	308	-20.925	9.088	-32.285	1.00	16.96	6	C	C
ATOM	8485	O	GLY	C	308	-22.144	9.234	-32.440	1.00	17.90	8	C	O
ATOM	8486	N	VAL	C	309	-20.238	8.030	-32.717	1.00	17.08	7	C	N
ATOM	8487	CA	VAL	C	309	-20.809	7.015	-33.562	1.00	17.91	6	C	C
ATOM	8488	C	VAL	C	309	-20.932	5.745	-32.733	1.00	19.01	6	C	C
ATOM	8489	O	VAL	C	309	-20.028	5.330	-32.003	1.00	18.94	8	C	O
ATOM	8490	CB	VAL	C	309	-20.004	6.706	-34.840	1.00	15.69	6	C	C
ATOM	8491	CG1	VAL	C	309	-18.512	6.464	-34.529	1.00	13.41	6	C	C
ATOM	8492	CG2	VAL	C	309	-20.603	5.534	-35.619	1.00	16.49	6	C	C
ATOM	8493	N	MET	C	310	-22.186	5.319	-32.704	1.00	18.55	7	C	N
ATOM	8494	CA	MET	C	310	-22.519	4.084	-32.036	1.00	20.82	6	C	C
ATOM	8495	C	MET	C	310	-22.594	2.987	-33.089	1.00	21.16	6	C	C
ATOM	8496	O	MET	C	310	-23.400	3.083	-34.044	1.00	22.96	8	C	O
ATOM	8497	CB	MET	C	310	-23.834	4.210	-31.256	1.00	20.28	6	C	C
ATOM	8498	CG	MET	C	310	-24.135	2.850	-30.644	1.00	22.51	6	C	C
ATOM	8499	SE	MET	C	310	-25.963	2.915	-30.045	1.00	40.58	34	C	SE
ATOM	8500	CE2	MET	C	310	-26.010	1.505	-28.716	1.00	20.47	6	C	C
ATOM	8501	N	LYS	C	311	-21.826	1.919	-32.892	1.00	20.99	7	C	N
ATOM	8502	CA	LYS	C	311	-21.915	0.819	-33.872	1.00	21.82	6	C	C
ATOM	8503	C	LYS	C	311	-23.245	0.130	-33.649	1.00	22.21	6	C	C
ATOM	8504	O	LYS	C	311	-23.868	0.292	-32.573	1.00	21.16	8	C	O
ATOM	8505	CB	LYS	C	311	-20.696	-0.081	-33.634	1.00	23.16	6	C	C
ATOM	8506	CG	LYS	C	311	-20.924	-1.136	-32.554	1.00	23.40	6	C	C
ATOM	8507	CD	LYS	C	311	-19.648	-1.835	-32.116	1.00	22.16	6	C	C
ATOM	8508	CE	LYS	C	311	-19.994	-3.242	-31.577	1.00	22.36	6	C	C
ATOM	8509	NZ	LYS	C	311	-18.880	-3.668	-30.623	1.00	22.43	7	C	N
ATOM	8510	N	PRO	C	312	-23.686	-0.701	-34.578	1.00	22.56	7	C	N
ATOM	8511	CA	PRO	C	312	-24.924	-1.448	-34.363	1.00	24.81	6	C	C
ATOM	8512	C	PRO	C	312	-24.779	-2.396	-33.177	1.00	27.71	6	C	C
ATOM	8513	O	PRO	C	312	-23.708	-2.944	-32.883	1.00	28.04	8	C	O
ATOM	8514	CB	PRO	C	312	-25.169	-2.136	-35.681	1.00	25.45	6	C	C
ATOM	8515	CG	PRO	C	312	-24.252	-1.470	-36.670	1.00	25.65	6	C	C
ATOM	8516	CD	PRO	C	312	-23.049	-0.985	-35.881	1.00	22.82	6	C	C
ATOM	8517	N	ILE	C	313	-25.825	-2.611	-32.404	1.00	25.65	7	C	N
ATOM	8518	CA	ILE	C	313	-25.829	-3.506	-31.247	1.00	27.19	6	C	C
ATOM	8519	C	ILE	C	313	-25.370	-4.895	-31.696	1.00	25.36	6	C	C
ATOM	8520	O	ILE	C	313	-25.812	-5.353	-32.741	1.00	23.14	8	C	O
ATOM	8521	CB	ILE	C	313	-27.241	-3.562	-30.668	1.00	28.85	6	C	C
ATOM	8522	CG1	ILE	C	313	-27.421	-2.470	-29.588	1.00	29.18	6	C	C
ATOM	8523	CG2	ILE	C	313	-27.623	-4.924	-30.114	1.00	32.17	6	C	C
ATOM	8524	CD1	ILE	C	313	-28.923	-2.336	-29.339	1.00	31.21	6	C	C

109/188

ATOM	8525	N	PRO	C	314	-24.440	-5.480	-30.997	1.00	25.63	7	C	N
ATOM	8526	CA	PRO	C	314	-23.838	-6.742	-31.399	1.00	27.65	6	C	C
ATOM	8527	C	PRO	C	314	-24.774	-7.945	-31.335	1.00	28.38	6	C	C
ATOM	8528	O	PRO	C	314	-24.519	-8.834	-32.126	1.00	29.62	8	C	O
ATOM	8529	CB	PRO	C	314	-22.724	-7.038	-30.385	1.00	24.27	6	C	C
ATOM	8530	CG	PRO	C	314	-22.484	-5.743	-29.711	1.00	25.99	6	C	C
ATOM	8531	CD	PRO	C	314	-23.734	-4.904	-29.827	1.00	25.52	6	C	C
ATOM	8532	N	THR	C	315	-25.732	-7.984	-30.434	1.00	30.77	7	C	N
ATOM	8533	CA	THR	C	315	-26.597	-9.143	-30.331	1.00	35.44	6	C	C
ATOM	8534	C	THR	C	315	-27.632	-9.175	-31.453	1.00	38.52	6	C	C
ATOM	8535	O	THR	C	315	-28.595	-8.408	-31.423	1.00	41.61	8	C	O
ATOM	8536	CB	THR	C	315	-27.326	-9.241	-28.983	1.00	33.25	6	C	C
ATOM	8537	OG1	THR	C	315	-26.411	-9.262	-27.892	1.00	30.86	8	C	O
ATOM	8538	CG2	THR	C	315	-28.172	-10.518	-28.954	1.00	33.71	6	C	C
ATOM	8539	N	LEU	C	316	-27.442	-10.093	-32.369	1.00	40.69	7	C	N
ATOM	8540	CA	LEU	C	316	-28.332	-10.324	-33.492	1.00	43.31	6	C	C
ATOM	8541	C	LEU	C	316	-29.255	-11.496	-33.148	1.00	46.80	6	C	C
ATOM	8542	O	LEU	C	316	-28.791	-12.441	-32.518	1.00	45.83	8	C	O
ATOM	8543	CB	LEU	C	316	-27.500	-10.578	-34.739	1.00	41.80	6	C	C
ATOM	8544	CG	LEU	C	316	-27.065	-9.419	-35.630	1.00	43.52	6	C	C
ATOM	8545	CD1	LEU	C	316	-26.717	-8.122	-34.925	1.00	41.66	6	C	C
ATOM	8546	CD2	LEU	C	316	-25.880	-9.843	-36.504	1.00	43.97	6	C	C
ATOM	8547	N	TYR	C	317	-30.560	-11.352	-33.408	1.00	49.35	7	C	N
ATOM	8548	CA	TYR	C	317	-31.511	-12.433	-33.140	1.00	50.88	6	C	C
ATOM	8549	C	TYR	C	317	-31.288	-13.518	-34.203	1.00	51.18	6	C	C
ATOM	8550	O	TYR	C	317	-31.684	-14.663	-34.060	1.00	50.58	8	C	O
ATOM	8551	CB	TYR	C	317	-32.936	-11.909	-33.045	1.00	53.21	6	C	C
ATOM	8552	CG	TYR	C	317	-33.322	-11.397	-31.670	1.00	55.00	6	C	C
ATOM	8553	CD1	TYR	C	317	-32.400	-10.722	-30.869	1.00	56.05	6	C	C
ATOM	8554	CD2	TYR	C	317	-34.603	-11.568	-31.162	1.00	54.90	6	C	C
ATOM	8555	CE1	TYR	C	317	-32.725	-10.249	-29.612	1.00	55.45	6	C	C
ATOM	8556	CE2	TYR	C	317	-34.947	-11.098	-29.914	1.00	54.99	6	C	C
ATOM	8557	CZ	TYR	C	317	-34.010	-10.448	-29.146	1.00	55.94	6	C	C
ATOM	8558	OH	TYR	C	317	-34.356	-9.987	-27.888	1.00	55.64	8	C	O
ATOM	8559	N	LYS	C	318	-30.548	-13.128	-35.219	1.00	50.66	7	C	N
ATOM	8560	CA	LYS	C	318	-30.105	-14.043	-36.283	1.00	51.36	6	C	C
ATOM	8561	C	LYS	C	318	-28.602	-14.101	-36.057	1.00	49.32	6	C	C
ATOM	8562	O	LYS	C	318	-27.836	-13.287	-36.555	1.00	46.02	8	C	O
ATOM	8563	CB	LYS	C	318	-30.542	-13.399	-37.597	1.00	54.24	6	C	C
ATOM	8564	CG	LYS	C	318	-31.905	-12.785	-37.322	1.00	59.34	6	C	C
ATOM	8565	CD	LYS	C	318	-33.029	-12.794	-38.306	1.00	62.61	6	C	C
ATOM	8566	CE	LYS	C	318	-32.849	-13.806	-39.367	1.00	65.01	6	C	C
ATOM	8567	NZ	LYS	C	318	-31.614	-13.540	-40.194	1.00	67.30	7	C	N
ATOM	8568	N	PRO	C	319	-28.184	-14.931	-35.100	1.00	49.20	7	C	N
ATOM	8569	CA	PRO	C	319	-26.802	-14.978	-34.667	1.00	49.09	6	C	C
ATOM	8570	C	PRO	C	319	-25.736	-15.289	-35.702	1.00	47.90	6	C	C
ATOM	8571	O	PRO	C	319	-25.898	-16.091	-36.604	1.00	46.56	8	C	O
ATOM	8572	CB	PRO	C	319	-26.759	-16.022	-33.556	1.00	49.34	6	C	C
ATOM	8573	CG	PRO	C	319	-28.031	-16.789	-33.685	1.00	49.16	6	C	C
ATOM	8574	CD	PRO	C	319	-29.030	-15.875	-34.327	1.00	48.67	6	C	C
ATOM	8575	N	LEU	C	320	-24.588	-14.623	-35.529	1.00	45.06	7	C	N
ATOM	8576	CA	LEU	C	320	-23.426	-14.830	-36.378	1.00	43.78	6	C	C
ATOM	8577	C	LEU	C	320	-22.605	-16.018	-35.885	1.00	41.95	6	C	C
ATOM	8578	O	LEU	C	320	-22.826	-16.628	-34.833	1.00	40.75	8	C	O
ATOM	8579	CB	LEU	C	320	-22.590	-13.543	-36.397	1.00	44.61	6	C	C
ATOM	8580	CG	LEU	C	320	-23.288	-12.279	-36.889	1.00	44.81	6	C	C
ATOM	8581	CD1	LEU	C	320	-22.490	-11.024	-36.565	1.00	44.91	6	C	C
ATOM	8582	CD2	LEU	C	320	-23.530	-12.381	-38.388	1.00	43.37	6	C	C
ATOM	8583	N	MET	C	321	-21.607	-16.414	-36.666	1.00	39.27	7	C	N
ATOM	8584	CA	MET	C	321	-20.710	-17.517	-36.381	1.00	35.72	6	C	C
ATOM	8585	C	MET	C	321	-19.782	-17.281	-35.174	1.00	32.63	6	C	C
ATOM	8586	O	MET	C	321	-19.124	-16.255	-35.093	1.00	28.95	8	C	O
ATOM	8587	CB	MET	C	321	-19.797	-17.742	-37.582	1.00	37.03	6	C	C
ATOM	8588	CG	MET	C	321	-19.007	-19.013	-37.723	1.00	36.70	6	C	C
ATOM	8589	SE	MET	C	321	-20.493	-20.380	-36.879	1.00	100.40	34	C	SE
ATOM	8590	CE2	MET	C	321	-22.599	-20.770	-37.786	1.00	51.12	6	C	C
ATOM	8591	N	SER	C	322	-19.535	-18.346	-34.421	1.00	29.51	7	C	N
ATOM	8592	CA	SER	C	322	-18.658	-18.295	-33.257	1.00	28.96	6	C	C
ATOM	8593	C	SER	C	322	-18.089	-19.666	-32.941	1.00	28.90	6	C	C
ATOM	8594	O	SER	C	322	-18.024	-20.539	-33.806	1.00	25.97	8	C	O
ATOM	8595	CB	SER	C	322	-19.437	-17.648	-32.113	1.00	28.33	6	C	C
ATOM	8596	OG	SER	C	322	-18.667	-17.506	-30.935	1.00	27.89	8	C	O
ATOM	8597	N	VAL	C	323	-17.571	-19.846	-31.731	1.00	28.47	7	C	N
ATOM	8598	CA	VAL	C	323	-16.920	-21.059	-31.293	1.00	27.03	6	C	C
ATOM	8599	C	VAL	C	323	-17.364	-21.397	-29.875	1.00	29.61	6	C	C
ATOM	8600	O	VAL	C	323	-17.501	-20.494	-29.038	1.00	30.70	8	C	O
ATOM	8601	CB	VAL	C	323	-15.386	-20.921	-31.293	1.00	24.93	6	C	C
ATOM	8602	CG1	VAL	C	323	-14.729	-22.187	-30.727	1.00	24.43	6	C	C
ATOM	8603	CG2	VAL	C	323	-14.817	-20.606	-32.665	1.00	23.81	6	C	C

110/188

ATOM	8604	N	ASP	C	324	-17.617	-22.661	-29.568	1.00	28.59	7	C	N
ATOM	8605	CA	ASP	C	324	-17.993	-23.154	-28.245	1.00	28.59	6	C	C
ATOM	8606	C	ASP	C	324	-16.705	-23.258	-27.422	1.00	27.76	6	C	C
ATOM	8607	O	ASP	C	324	-15.793	-24.006	-27.845	1.00	24.96	8	C	O
ATOM	8608	CB	ASP	C	324	-18.622	-24.535	-28.433	1.00	31.67	6	C	C
ATOM	8609	CG	ASP	C	324	-19.091	-25.280	-27.224	1.00	32.80	6	C	C
ATOM	8610	OD1	ASP	C	324	-20.229	-25.822	-27.334	1.00	34.05	8	C	O
ATOM	8611	OD2	ASP	C	324	-18.389	-25.339	-26.183	1.00	32.90	8	C	O
ATOM	8612	N	ILE	C	325	-16.591	-22.519	-26.320	1.00	25.76	7	C	N
ATOM	8613	CA	ILE	C	325	-15.306	-22.489	-25.631	1.00	26.84	6	C	C
ATOM	8614	C	ILE	C	325	-14.921	-23.772	-24.907	1.00	27.25	6	C	C
ATOM	8615	O	ILE	C	325	-13.761	-23.850	-24.494	1.00	25.16	8	C	O
ATOM	8616	CB	ILE	C	325	-15.226	-21.326	-24.628	1.00	27.04	6	C	C
ATOM	8617	CG1	ILE	C	325	-16.260	-21.523	-23.509	1.00	29.02	6	C	C
ATOM	8618	CG2	ILE	C	325	-15.457	-20.038	-25.404	1.00	28.29	6	C	C
ATOM	8619	CD1	ILE	C	325	-16.030	-20.541	-22.369	1.00	28.30	6	C	C
ATOM	8620	N	GLU	C	326	-15.872	-24.663	-24.654	1.00	29.70	7	C	N
ATOM	8621	CA	GLU	C	326	-15.559	-25.931	-24.025	1.00	33.51	6	C	C
ATOM	8622	C	GLU	C	326	-15.134	-26.981	-25.048	1.00	34.28	6	C	C
ATOM	8623	O	GLU	C	326	-14.294	-27.821	-24.749	1.00	35.42	8	C	O
ATOM	8624	CB	GLU	C	326	-16.769	-26.511	-23.310	1.00	37.02	6	C	C
ATOM	8625	CG	GLU	C	326	-17.285	-25.659	-22.155	1.00	40.40	6	C	C
ATOM	8626	CD	GLU	C	326	-18.404	-26.441	-21.487	1.00	43.62	6	C	C
ATOM	8627	OE1	GLU	C	326	-18.209	-26.837	-20.328	1.00	45.44	8	C	O
ATOM	8628	OE2	GLU	C	326	-19.431	-26.680	-22.161	1.00	45.40	8	C	O
ATOM	8629	N	THR	C	327	-15.622	-26.857	-26.289	1.00	33.51	7	C	N
ATOM	8630	CA	THR	C	327	-15.225	-27.857	-27.274	1.00	33.39	6	C	C
ATOM	8631	C	THR	C	327	-14.353	-27.326	-28.387	1.00	32.89	6	C	C
ATOM	8632	O	THR	C	327	-13.804	-28.118	-29.145	1.00	33.55	8	C	O
ATOM	8633	CB	THR	C	327	-16.456	-28.465	-27.969	1.00	32.09	6	C	C
ATOM	8634	OG1	THR	C	327	-17.065	-27.395	-28.682	1.00	28.75	8	C	O
ATOM	8635	CG2	THR	C	327	-17.389	-29.074	-26.930	1.00	33.65	6	C	C
ATOM	8636	N	HIS	C	328	-14.225	-26.014	-28.538	1.00	31.84	7	C	N
ATOM	8637	CA	HIS	C	328	-13.495	-25.432	-29.631	1.00	30.47	6	C	C
ATOM	8638	C	HIS	C	328	-14.158	-25.703	-31.000	1.00	32.27	6	C	C
ATOM	8639	O	HIS	C	328	-13.500	-25.483	-32.012	1.00	30.37	8	C	O
ATOM	8640	CB	HIS	C	328	-12.034	-25.832	-29.652	1.00	28.70	6	C	C
ATOM	8641	CG	HIS	C	328	-11.246	-25.123	-28.587	1.00	30.33	6	C	C
ATOM	8642	ND1	HIS	C	328	-10.211	-25.750	-27.910	1.00	28.88	7	C	N
ATOM	8643	CD2	HIS	C	328	-11.301	-23.839	-28.141	1.00	27.74	6	C	C
ATOM	8644	CE1	HIS	C	328	-9.659	-24.899	-27.069	1.00	29.02	6	C	C
ATOM	8645	NE2	HIS	C	328	-10.296	-23.751	-27.206	1.00	29.53	7	C	N
ATOM	8646	N	GLU	C	329	-15.419	-26.093	-31.047	1.00	34.80	7	C	N
ATOM	8647	CA	GLU	C	329	-16.140	-26.256	-32.300	1.00	39.65	6	C	C
ATOM	8648	C	GLU	C	329	-16.899	-25.019	-32.736	1.00	40.93	6	C	C
ATOM	8649	O	GLU	C	329	-17.350	-24.241	-31.893	1.00	40.01	8	C	O
ATOM	8650	CB	GLU	C	329	-17.115	-27.445	-32.123	1.00	42.14	6	C	C
ATOM	8651	CG	AGLU	C	329	-16.380	-28.756	-31.911	0.50	43.47	6	C	C
ATOM	8652	CG	BGLU	C	329	-16.344	-28.723	-32.455	0.50	44.56	6	C	C
ATOM	8653	CD	AGLU	C	329	-15.766	-29.332	-33.163	0.50	44.48	6	C	C
ATOM	8654	CD	BGLU	C	329	-16.843	-29.979	-31.790	0.50	46.54	6	C	C
ATOM	8655	OE1AGLU	C	329	-16.164	-28.968	-34.290	0.50	45.20	8	C	O	
ATOM	8656	OE1BGLU	C	329	-16.142	-31.011	-31.897	0.50	47.00	8	C	O	
ATOM	8657	OE2AGLU	C	329	-14.856	-30.186	-33.029	0.50	45.01	8	C	O	
ATOM	8658	OE2BGLU	C	329	-17.918	-29.975	-31.151	0.50	47.80	8	C	O	
ATOM	8659	N	PRO	C	330	-17.044	-24.788	-34.036	1.00	42.70	7	C	N
ATOM	8660	CA	PRO	C	330	-17.805	-23.673	-34.568	1.00	42.94	6	C	C
ATOM	8661	C	PRO	C	330	-19.262	-23.839	-34.148	1.00	44.97	6	C	C
ATOM	8662	O	PRO	C	330	-19.688	-24.988	-34.029	1.00	41.20	8	C	O
ATOM	8663	CB	PRO	C	330	-17.652	-23.730	-36.071	1.00	43.82	6	C	C
ATOM	8664	CG	PRO	C	330	-16.717	-24.848	-36.350	1.00	44.21	6	C	C
ATOM	8665	CD	PRO	C	330	-16.594	-25.702	-35.119	1.00	42.97	6	C	C
ATOM	8666	N	TYR	C	331	-19.926	-22.717	-33.919	1.00	47.30	7	C	N
ATOM	8667	CA	TYR	C	331	-21.316	-22.706	-33.466	1.00	52.24	6	C	C
ATOM	8668	C	TYR	C	331	-21.871	-21.282	-33.525	1.00	52.47	6	C	C
ATOM	8669	O	TYR	C	331	-21.095	-20.326	-33.413	1.00	51.74	8	C	O
ATOM	8670	CB	TYR	C	331	-21.318	-23.095	-32.002	1.00	55.94	6	C	C
ATOM	8671	CG	TYR	C	331	-22.397	-23.917	-31.374	1.00	59.95	6	C	C
ATOM	8672	CD1	TYR	C	331	-22.188	-25.286	-31.208	1.00	62.33	6	C	C
ATOM	8673	CD2	TYR	C	331	-23.592	-23.388	-30.918	1.00	61.19	6	C	C
ATOM	8674	CE1	TYR	C	331	-23.141	-26.103	-30.624	1.00	63.90	6	C	C
ATOM	8675	CE2	TYR	C	331	-24.555	-24.190	-30.333	1.00	63.42	6	C	C
ATOM	8676	CZ	TYR	C	331	-24.324	-25.545	-30.188	1.00	64.12	6	C	C
ATOM	8677	OH	TYR	C	331	-25.281	-26.352	-29.603	1.00	65.56	8	C	O
ATOM	8678	N	LYS	C	332	-23.180	-21.128	-33.661	1.00	52.84	7	C	N
ATOM	8679	CA	LYS	C	332	-23.744	-19.772	-33.760	1.00	52.71	6	C	C
ATOM	8680	C	LYS	C	332	-23.598	-19.096	-32.395	1.00	51.43	6	C	C
ATOM	8681	O	LYS	C	332	-23.412	-19.786	-31.376	1.00	49.99	8	C	O
ATOM	8682	CE	LYS	C	332	-25.162	-19.832	-34.318	1.00	53.98	6	C	C

ATOM	8683	CG	LYS	C	332	-25.240	-20.527	-35.678	1.00	55.53	6	C	C
ATOM	8684	CD	LYS	C	332	-26.571	-20.244	-36.377	1.00	58.19	6	C	C
ATOM	8685	CE	LYS	C	332	-26.407	-19.867	-37.843	1.00	57.89	6	C	C
ATOM	8686	NZ	LYS	C	332	-25.597	-20.867	-38.595	1.00	58.12	7	C	N
ATOM	8687	N	ALA	C	333	-23.509	-17.770	-32.365	1.00	49.52	7	C	N
ATOM	8688	CA	ALA	C	333	-23.363	-17.080	-31.083	1.00	48.69	6	C	C
ATOM	8689	C	ALA	C	333	-24.608	-17.262	-30.205	1.00	48.12	6	C	C
ATOM	8690	O	ALA	C	333	-25.685	-17.697	-30.637	1.00	46.43	8	C	O
ATOM	8691	CB	ALA	C	333	-23.129	-16.599	-31.309	1.00	47.55	6	C	C
ATOM	8692	N	THR	C	334	-24.434	-18.842	-28.925	1.00	47.03	7	C	N
ATOM	8693	CA	THR	C	334	-25.964	-18.964	-28.032	1.00	47.08	6	C	C
ATOM	8694	C	THR	C	334	-26.799	-15.786	-28.371	1.00	47.23	6	C	C
ATOM	8695	O	THR	C	334	-26.089	-14.751	-28.905	1.00	44.99	8	C	O
ATOM	8696	CB	THR	C	334	-25.253	-16.990	-26.541	1.00	46.86	6	C	C
ATOM	8697	OG1	THR	C	334	-26.453	-17.045	-25.746	1.00	45.13	8	C	O
ATOM	8698	CG2	THR	C	334	-24.522	-15.740	-26.096	1.00	46.56	6	C	C
ATOM	8699	N	VAL	C	335	-27.808	-16.021	-28.200	1.00	48.41	7	C	N
ATOM	8700	CA	VAL	C	335	-28.770	-14.962	-28.482	1.00	50.62	6	C	C
ATOM	8701	C	VAL	C	335	-29.353	-14.533	-27.140	1.00	50.42	6	C	C
ATOM	8702	O	VAL	C	335	-30.141	-15.264	-26.540	1.00	50.11	8	C	O
ATOM	8703	CB	VAL	C	335	-29.853	-15.339	-29.504	1.00	51.33	6	C	C
ATOM	8704	CG1	VAL	C	335	-30.840	-14.194	-29.661	1.00	51.89	6	C	C
ATOM	8705	CG2	VAL	C	335	-29.163	-15.634	-30.828	1.00	51.72	6	C	C
ATOM	8706	N	GLU	C	336	-28.926	-13.362	-26.663	1.00	49.79	7	C	N
ATOM	8707	CA	GLU	C	336	-29.471	-12.867	-25.393	1.00	50.51	6	C	C
ATOM	8708	C	GLU	C	336	-30.507	-11.763	-25.622	1.00	50.20	6	C	C
ATOM	8709	O	GLU	C	336	-30.467	-11.108	-26.664	1.00	49.73	8	C	O
ATOM	8710	CB	GLU	C	336	-28.413	-12.306	-24.451	1.00	50.35	6	C	C
ATOM	8711	CG	GLU	C	336	-27.189	-13.151	-24.193	1.00	50.76	6	C	C
ATOM	8712	CD	GLU	C	336	-27.402	-14.389	-23.354	1.00	50.79	6	C	C
ATOM	8713	OE1	GLU	C	336	-27.987	-14.336	-22.250	1.00	51.21	8	C	O
ATOM	8714	OE2	GLU	C	336	-26.947	-15.473	-23.768	1.00	50.75	8	C	O
ATOM	8715	N	ARG	C	337	-31.387	-11.526	-24.645	1.00	50.19	7	C	N
ATOM	8716	CA	ARG	C	337	-32.385	-10.462	-24.841	1.00	52.07	6	C	C
ATOM	8717	C	ARG	C	337	-31.723	-9.142	-25.247	1.00	51.71	6	C	C
ATOM	8718	O	ARG	C	337	-30.694	-8.790	-24.664	1.00	52.77	8	C	O
ATOM	8719	CB	ARG	C	337	-33.229	-10.280	-23.580	1.00	52.09	6	C	C
ATOM	8720	CG	ARG	C	337	-34.502	-9.479	-23.849	1.00	51.95	6	C	C
ATOM	8721	CD	ARG	C	337	-35.439	-9.472	-22.654	1.00	51.20	6	C	C
ATOM	8722	NE	ARG	C	337	-34.756	-9.278	-21.392	1.00	51.20	7	C	N
ATOM	8723	CZ	ARG	C	337	-35.174	-9.522	-20.157	1.00	50.90	6	C	C
ATOM	8724	NH1	ARG	C	337	-36.367	-10.006	-19.835	1.00	49.40	7	C	N
ATOM	8725	NH2	ARG	C	337	-34.365	-9.276	-19.118	1.00	51.05	7	C	N
ATOM	8726	N	SER	C	338	-32.209	-8.477	-26.270	1.00	51.67	7	C	N
ATOM	8727	CA	SER	C	338	-31.685	-7.242	-26.857	1.00	51.38	6	C	C
ATOM	8728	C	SER	C	338	-32.689	-6.586	-27.791	1.00	51.46	6	C	C
ATOM	8729	O	SER	C	338	-33.741	-7.199	-28.030	1.00	52.65	8	C	O
ATOM	8730	CB	SER	C	338	-30.385	-7.590	-27.598	1.00	51.09	6	C	C
ATOM	8731	OG	SER	C	338	-29.406	-8.088	-26.685	1.00	49.69	8	C	O
ATOM	8732	N	ASP	C	339	-32.434	-5.448	-28.422	1.00	50.77	7	C	N
ATOM	8733	CA	ASP	C	339	-33.353	-4.723	-29.324	1.00	46.00	6	C	C
ATOM	8734	C	ASP	C	339	-32.760	-4.515	-30.699	1.00	42.52	6	C	C
ATOM	8735	O	ASP	C	339	-31.522	-4.589	-30.734	1.00	44.37	8	C	O
ATOM	8736	CB	ASP	C	339	-33.465	-3.344	-28.630	1.00	46.13	6	C	C
ATOM	8737	CG	ASP	C	339	-34.040	-3.428	-27.235	1.00	47.34	6	C	C
ATOM	8738	OD1	ASP	C	339	-34.891	-4.328	-27.049	1.00	49.02	8	C	O
ATOM	8739	OD2	ASP	C	339	-33.771	-2.648	-26.310	1.00	46.42	8	C	O
ATOM	8740	N	PRO	C	340	-33.428	-4.203	-31.791	1.00	37.41	7	C	N
ATOM	8741	CA	PRO	C	340	-32.816	-3.841	-33.057	1.00	34.70	6	C	C
ATOM	8742	C	PRO	C	340	-31.994	-2.550	-33.012	1.00	30.30	6	C	C
ATOM	8743	O	PRO	C	340	-31.213	-2.314	-33.933	1.00	30.28	8	C	O
ATOM	8744	CB	PRO	C	340	-33.981	-3.570	-34.002	1.00	34.62	6	C	C
ATOM	8745	CG	PRO	C	340	-35.068	-3.147	-33.071	1.00	34.50	6	C	C
ATOM	8746	CD	PRO	C	340	-34.904	-4.011	-31.842	1.00	36.71	6	C	C
ATOM	8747	N	THR	C	341	-32.214	-1.671	-32.018	1.00	27.52	7	C	N
ATOM	8748	CA	THR	C	341	-31.363	-0.470	-31.955	1.00	24.67	6	C	C
ATOM	8749	C	THR	C	341	-31.497	0.172	-30.592	1.00	23.99	6	C	C
ATOM	8750	O	THR	C	341	-32.563	-0.008	-30.028	1.00	20.33	8	C	O
ATOM	8751	CB	THR	C	341	-31.645	0.593	-33.047	1.00	23.11	6	C	C
ATOM	8752	OG1	THR	C	341	-30.731	1.677	-32.912	1.00	21.54	8	C	O
ATOM	8753	CG2	THR	C	341	-33.066	1.134	-32.926	1.00	21.05	6	C	C
ATOM	8754	N	ALA	C	342	-30.448	0.864	-30.103	1.00	23.32	7	C	N
ATOM	8755	CA	ALA	C	342	-30.607	1.590	-28.843	1.00	23.67	6	C	C
ATOM	8756	C	ALA	C	342	-30.043	3.016	-29.005	1.00	23.94	6	C	C
ATOM	8757	O	ALA	C	342	-29.646	3.646	-28.022	1.00	25.57	8	C	O
ATOM	8758	CB	ALA	C	342	-29.976	0.903	-27.646	1.00	23.04	6	C	C
ATOM	8759	N	LEU	C	343	-30.026	3.533	-30.220	1.00	22.62	7	C	N
ATOM	8760	CA	LEU	C	343	-29.418	4.831	-30.507	1.00	22.60	6	C	C
ATOM	8761	C	LEU	C	343	-29.973	5.993	-29.736	1.00	19.65	6	C	C

112/188

ATOM	8762	O	LEU	C	343	-29.189	6.781	-29.208	1.00	22.05	8	C	O
ATOM	8763	CB	LEU	C	343	-29.343	5.050	-32.028	1.00	18.39	6	C	C
ATOM	8764	CG	LEU	C	343	-28.555	6.311	-32.428	1.00	19.49	6	C	C
ATOM	8765	CD1	LEU	C	343	-27.059	6.104	-32.168	1.00	19.05	6	C	C
ATOM	8766	CD2	LEU	C	343	-28.797	6.699	-33.884	1.00	18.65	6	C	C
ATOM	8767	N	PRO	C	344	-31.284	6.233	-29.658	1.00	19.32	7	C	N
ATOM	8768	CA	PRO	C	344	-31.835	7.347	-28.914	1.00	20.25	6	C	C
ATOM	8769	C	PRO	C	344	-31.324	7.304	-27.482	1.00	22.10	6	C	C
ATOM	8770	O	PRO	C	344	-31.018	8.317	-26.856	1.00	20.31	8	C	O
ATOM	8771	CB	PRO	C	344	-33.362	7.174	-29.053	1.00	21.43	6	C	C
ATOM	8772	CG	PRO	C	344	-33.470	6.479	-30.401	1.00	20.00	6	C	C
ATOM	8773	CD	PRO	C	344	-32.334	5.496	-30.391	1.00	20.24	6	C	C
ATOM	8774	N	ALA	C	345	-31.295	6.086	-26.900	1.00	22.40	7	C	N
ATOM	8775	CA	ALA	C	345	-30.895	5.962	-25.496	1.00	22.74	6	C	C
ATOM	8776	C	ALA	C	345	-29.389	6.261	-25.438	1.00	21.94	6	C	C
ATOM	8777	O	ALA	C	345	-29.021	6.969	-24.512	1.00	22.22	8	C	O
ATOM	8778	CB	ALA	C	345	-31.087	4.582	-24.909	1.00	21.25	6	C	C
ATOM	8779	N	ALA	C	346	-28.629	5.808	-26.409	1.00	20.80	7	C	N
ATOM	8780	CA	ALA	C	346	-27.189	6.085	-26.394	1.00	20.21	6	C	C
ATOM	8781	C	ALA	C	346	-26.963	7.593	-26.370	1.00	22.50	6	C	C
ATOM	8782	O	ALA	C	346	-25.939	8.089	-25.856	1.00	22.46	8	C	O
ATOM	8783	CB	ALA	C	346	-26.481	5.404	-27.554	1.00	20.99	6	C	C
ATOM	8784	N	GLY	C	347	-27.755	8.338	-27.125	1.00	19.94	7	C	N
ATOM	8785	CA	GLY	C	347	-27.743	9.779	-27.155	1.00	18.70	6	C	C
ATOM	8786	C	GLY	C	347	-27.850	10.374	-25.736	1.00	20.26	6	C	C
ATOM	8787	O	GLY	C	347	-27.248	11.381	-25.416	1.00	17.68	8	C	O
ATOM	8788	N	MET	C	348	-28.764	9.846	-24.941	1.00	18.94	7	C	N
ATOM	8789	CA	MET	C	348	-28.939	10.315	-23.576	1.00	20.38	6	C	C
ATOM	8790	C	MET	C	348	-27.656	9.979	-22.808	1.00	19.54	6	C	C
ATOM	8791	O	MET	C	348	-27.228	10.765	-21.959	1.00	19.54	8	C	O
ATOM	8792	CB	MET	C	348	-30.159	9.626	-22.965	1.00	21.15	6	C	C
ATOM	8793	CG	MET	C	348	-30.362	9.917	-21.473	1.00	22.33	6	C	C
ATOM	8794	SE	MET	C	348	-30.879	11.958	-21.237	1.00	56.05	34	C	SE
ATOM	8795	CE2	MET	C	348	-29.126	12.639	-20.118	1.00	19.17	6	C	C
ATOM	8796	N	VAL	C	349	-27.132	8.797	-23.005	1.00	17.18	7	C	N
ATOM	8797	CA	VAL	C	349	-25.901	8.420	-22.277	1.00	18.03	6	C	C
ATOM	8798	C	VAL	C	349	-24.795	9.400	-22.636	1.00	16.02	6	C	C
ATOM	8799	O	VAL	C	349	-24.071	9.994	-21.802	1.00	15.79	8	C	O
ATOM	8800	CB	VAL	C	349	-25.500	6.969	-22.588	1.00	16.97	6	C	C
ATOM	8801	CG1	VAL	C	349	-24.222	6.600	-21.802	1.00	18.99	6	C	C
ATOM	8802	CG2	VAL	C	349	-26.587	5.987	-22.093	1.00	17.95	6	C	C
ATOM	8803	N	MET	C	350	-24.691	9.720	-23.935	1.00	17.27	7	C	N
ATOM	8804	CA	MET	C	350	-23.664	10.690	-24.330	1.00	16.69	6	C	C
ATOM	8805	C	MET	C	350	-23.823	12.068	-23.704	1.00	18.37	6	C	C
ATOM	8806	O	MET	C	350	-22.873	12.759	-23.338	1.00	16.34	8	C	O
ATOM	8807	CB	MET	C	350	-23.688	10.871	-25.863	1.00	16.82	6	C	C
ATOM	8808	CG	MET	C	350	-22.355	11.453	-26.276	1.00	16.42	6	C	C
ATOM	8809	SE	MET	C	350	-22.663	11.988	-28.312	1.00	36.49	34	C	SE
ATOM	8810	CE2	MET	C	350	-21.031	13.048	-28.668	1.00	12.56	6	C	C
ATOM	8811	N	GLU	C	351	-25.083	12.498	-23.675	1.00	18.15	7	C	N
ATOM	8812	CA	GLU	C	351	-25.420	13.775	-23.068	1.00	19.56	6	C	C
ATOM	8813	C	GLU	C	351	-24.928	13.814	-21.632	1.00	18.82	6	C	C
ATOM	8814	O	GLU	C	351	-24.234	14.754	-21.258	1.00	17.23	8	C	O
ATOM	8815	CB	GLU	C	351	-26.961	13.971	-23.065	1.00	20.85	6	C	C
ATOM	8816	CG	GLU	C	351	-27.388	15.233	-22.326	1.00	20.50	6	C	C
ATOM	8817	CD	GLU	C	351	-28.841	15.585	-22.525	1.00	21.90	6	C	C
ATOM	8818	OE1	GLU	C	351	-29.473	16.107	-21.597	1.00	22.81	8	C	O
ATOM	8819	OE2	GLU	C	351	-29.342	15.358	-23.624	1.00	22.49	8	C	O
ATOM	8820	N	ALA	C	352	-25.196	12.742	-20.868	1.00	18.49	7	C	N
ATOM	8821	CA	ALA	C	352	-24.763	12.710	-19.469	1.00	17.92	6	C	C
ATOM	8822	C	ALA	C	352	-23.264	12.688	-19.246	1.00	17.04	6	C	C
ATOM	8823	O	ALA	C	352	-22.650	13.388	-18.420	1.00	15.64	8	C	O
ATOM	8824	CB	ALA	C	352	-25.406	11.436	-18.866	1.00	19.26	6	C	C
ATOM	8825	N	VAL	C	353	-22.602	11.917	-20.082	1.00	19.74	7	C	N
ATOM	8826	CA	VAL	C	353	-21.137	11.765	-20.034	1.00	19.03	6	C	C
ATOM	8827	C	VAL	C	353	-20.491	13.088	-20.369	1.00	19.29	6	C	C
ATOM	8828	O	VAL	C	353	-19.515	13.526	-19.738	1.00	18.76	8	C	O
ATOM	8829	CB	VAL	C	353	-20.804	10.605	-20.973	1.00	21.91	6	C	C
ATOM	8830	CG1	VAL	C	353	-19.354	10.523	-21.386	1.00	25.01	6	C	C
ATOM	8831	CG2	VAL	C	353	-21.216	9.247	-20.433	1.00	21.25	6	C	C
ATOM	8832	N	VAL	C	354	-21.021	13.797	-21.381	1.00	18.24	7	C	N
ATOM	8833	CA	VAL	C	354	-20.416	15.099	-21.762	1.00	17.22	6	C	C
ATOM	8834	C	VAL	C	354	-20.580	16.070	-20.632	1.00	15.41	6	C	C
ATOM	8835	O	VAL	C	354	-19.631	16.739	-20.147	1.00	17.77	8	C	O
ATOM	8836	CB	VAL	C	354	-21.012	15.626	-23.092	1.00	18.36	6	C	C
ATOM	8837	CG1	VAL	C	354	-20.760	17.123	-23.317	1.00	17.16	6	C	C
ATOM	8838	CG2	VAL	C	354	-20.453	14.835	-24.277	1.00	17.22	6	C	C
ATOM	8839	N	ALA	C	355	-21.790	16.140	-20.088	1.00	15.77	7	C	N
ATOM	8840	CA	ALA	C	355	-22.079	16.981	-18.949	1.00	16.51	6	C	C

113/188

ATOM	8841	C	ALA	C	355	-21.160	16.661	-17.769	1.00	17.42	6	C	C
ATOM	8842	O	ALA	C	355	-20.721	17.577	-17.093	1.00	16.05	8	C	O
ATOM	8843	CB	ALA	C	355	-23.529	16.711	-18.519	1.00	17.39	6	C	C
ATOM	8844	N	THR	C	356	-20.931	15.359	-17.531	1.00	15.79	7	C	N
ATOM	8845	CA	THR	C	356	-20.080	14.929	-16.415	1.00	16.60	6	C	C
ATOM	8846	C	THR	C	356	-18.669	15.489	-16.508	1.00	17.40	6	C	C
ATOM	8847	O	THR	C	356	-18.038	16.057	-15.591	1.00	16.66	8	C	O
ATOM	8848	CB	THR	C	356	-20.100	13.375	-16.384	1.00	16.40	6	C	C
ATOM	8849	OG1	THR	C	356	-21.422	12.925	-15.998	1.00	14.13	8	C	O
ATOM	8850	CG2	THR	C	356	-19.076	12.878	-15.364	1.00	16.67	6	C	C
ATOM	8851	N	VAL	C	357	-18.062	15.258	-17.689	1.00	18.33	7	C	N
ATOM	8852	CA	VAL	C	357	-16.684	15.753	-17.911	1.00	16.05	6	C	C
ATOM	8853	C	VAL	C	357	-16.608	17.256	-17.732	1.00	18.43	6	C	C
ATOM	8854	O	VAL	C	357	-15.611	17.878	-17.293	1.00	16.64	8	C	O
ATOM	8855	CB	VAL	C	357	-16.238	15.290	-19.308	1.00	15.96	6	C	C
ATOM	8856	CG1	VAL	C	357	-14.940	15.977	-19.760	1.00	16.75	6	C	C
ATOM	8857	CG2	VAL	C	357	-16.036	13.775	-19.296	1.00	16.94	6	C	C
ATOM	8858	N	LEU	C	358	-17.551	17.966	-18.385	1.00	18.76	7	C	N
ATOM	8859	CA	LEU	C	358	-17.629	19.417	-18.290	1.00	21.44	6	C	C
ATOM	8860	C	LEU	C	358	-17.740	19.966	-16.872	1.00	19.45	6	C	C
ATOM	8861	O	LEU	C	358	-17.053	20.916	-16.510	1.00	17.43	8	C	O
ATOM	8862	CB	LEU	C	358	-18.850	19.936	-19.066	1.00	24.00	6	C	C
ATOM	8863	CG	LEU	C	358	-18.559	20.737	-20.305	1.00	30.63	6	C	C
ATOM	8864	CD1	LEU	C	358	-18.045	22.128	-19.876	1.00	29.18	6	C	C
ATOM	8865	CD2	LEU	C	358	-17.472	20.119	-21.175	1.00	29.40	6	C	C
ATOM	8866	N	ALA	C	359	-18.612	19.353	-16.069	1.00	17.93	7	C	N
ATOM	8867	CA	ALA	C	359	-18.723	19.713	-14.658	1.00	18.76	6	C	C
ATOM	8868	C	ALA	C	359	-17.405	19.396	-13.941	1.00	18.49	6	C	C
ATOM	8869	O	ALA	C	359	-16.919	20.195	-13.131	1.00	16.24	8	C	O
ATOM	8870	CB	ALA	C	359	-19.898	18.920	-14.082	1.00	18.49	6	C	C
ATOM	8871	N	GLN	C	360	-16.793	18.282	-14.322	1.00	16.89	7	C	N
ATOM	8872	CA	GLN	C	360	-15.470	17.982	-13.690	1.00	17.81	6	C	C
ATOM	8873	C	GLN	C	360	-14.472	19.081	-14.012	1.00	17.90	6	C	C
ATOM	8874	O	GLN	C	360	-13.632	19.459	-13.174	1.00	18.84	8	C	O
ATOM	8875	CB	GLN	C	360	-14.952	16.648	-14.226	1.00	18.91	6	C	C
ATOM	8876	CG	GLN	C	360	-15.644	15.439	-13.530	1.00	18.88	6	C	C
ATOM	8877	CD	GLN	C	360	-15.018	14.169	-14.125	1.00	20.06	6	C	C
ATOM	8878	OE1	GLN	C	360	-15.171	13.891	-15.320	1.00	19.02	8	C	O
ATOM	8879	NE2	GLN	C	360	-14.427	13.294	-13.329	1.00	20.15	7	C	N
ATOM	8880	N	GLU	C	361	-14.496	19.529	-15.264	1.00	17.44	7	C	N
ATOM	8881	CA	GLU	C	361	-13.545	20.551	-15.730	1.00	18.35	6	C	C
ATOM	8882	C	GLU	C	361	-13.826	21.888	-15.020	1.00	19.88	6	C	C
ATOM	8883	O	GLU	C	361	-12.923	22.585	-14.533	1.00	19.01	8	C	O
ATOM	8884	CB	GLU	C	361	-13.595	20.683	-17.265	1.00	16.92	6	C	C
ATOM	8885	CG	GLU	C	361	-12.380	21.474	-17.797	1.00	19.06	6	C	C
ATOM	8886	CD	GLU	C	361	-11.034	20.784	-17.715	1.00	16.73	6	C	C
ATOM	8887	OE1	GLU	C	361	-11.060	19.558	-17.858	1.00	18.56	8	C	O
ATOM	8888	OE2	GLU	C	361	-9.982	21.386	-17.420	1.00	19.63	8	C	O
ATOM	8889	N	ILE	C	362	-15.123	22.241	-14.878	1.00	18.62	7	C	N
ATOM	8890	CA	ILE	C	362	-15.473	23.445	-14.146	1.00	20.50	6	C	C
ATOM	8891	C	ILE	C	362	-15.016	23.365	-12.685	1.00	19.36	6	C	C
ATOM	8892	O	ILE	C	362	-14.594	24.366	-12.085	1.00	16.87	8	C	O
ATOM	8893	CB	ILE	C	362	-17.015	23.622	-14.250	1.00	21.80	6	C	C
ATOM	8894	CG1	ILE	C	362	-17.321	24.262	-15.614	1.00	21.97	6	C	C
ATOM	8895	CG2	ILE	C	362	-17.528	24.577	-13.175	1.00	22.57	6	C	C
ATOM	8896	CD1	ILE	C	362	-18.736	24.065	-16.129	1.00	22.57	6	C	C
ATOM	8897	N	LEU	C	363	-15.249	22.231	-12.028	1.00	17.76	7	C	N
ATOM	8898	CA	LEU	C	363	-14.845	22.048	-10.623	1.00	18.48	6	C	C
ATOM	8899	C	LEU	C	363	-13.334	22.091	-10.443	1.00	18.85	6	C	C
ATOM	8900	O	LEU	C	363	-12.772	22.555	-9.436	1.00	18.70	8	C	O
ATOM	8901	CB	LEU	C	363	-15.408	20.710	-10.092	1.00	19.86	6	C	C
ATOM	8902	CG	LEU	C	363	-16.954	20.663	-10.063	1.00	19.14	6	C	C
ATOM	8903	CD1	LEU	C	363	-17.399	19.295	-9.586	1.00	21.47	6	C	C
ATOM	8904	CD2	LEU	C	363	-17.567	21.761	-9.232	1.00	21.45	6	C	C
ATOM	8905	N	GLU	C	364	-12.595	21.695	-11.505	1.00	18.01	7	C	N
ATOM	8906	CA	GLU	C	364	-11.133	21.812	-11.379	1.00	19.91	6	C	C
ATOM	8907	C	GLU	C	364	-10.664	23.267	-11.469	1.00	20.77	6	C	C
ATOM	8908	O	GLU	C	364	-9.683	23.742	-10.870	1.00	18.07	8	C	O
ATOM	8909	CB	GLU	C	364	-10.550	21.009	-12.551	1.00	22.63	6	C	C
ATOM	8910	CG	GLU	C	364	-9.057	20.769	-12.386	1.00	30.45	6	C	C
ATOM	8911	CD	GLU	C	364	-8.418	20.185	-13.639	1.00	34.32	6	C	C
ATOM	8912	OE1	GLU	C	364	-9.047	19.287	-14.252	1.00	33.24	8	C	O
ATOM	8913	OE2	GLU	C	364	-7.297	20.698	-13.942	1.00	37.34	8	C	O
ATOM	8914	N	LYS	C	365	-11.317	23.977	-12.410	1.00	18.96	7	C	N
ATOM	8915	CA	LYS	C	365	-10.845	25.296	-12.779	1.00	19.83	6	C	C
ATOM	8916	C	LYS	C	365	-11.195	26.373	-11.765	1.00	18.92	6	C	C
ATOM	8917	O	LYS	C	365	-10.412	27.312	-11.586	1.00	16.00	8	C	O
ATOM	8918	CB	LYS	C	365	-11.317	25.680	-14.211	1.00	19.19	6	C	C
ATOM	8919	CG	LYS	C	365	-11.025	27.157	-14.532	1.00	18.64	6	C	C

114/188

ATOM	8920	CD	LYS	C	365	-11.061	27.489	-16.008	1.00	18.92	6	C	C
ATOM	8921	CE	LYS	C	365	-11.032	28.990	-16.320	1.00	17.93	6	C	C
ATOM	8922	NZ	LYS	C	365	-9.869	29.677	-15.656	1.00	15.12	7	C	N
ATOM	8923	N	PHE	C	366	-12.365	26.307	-11.142	1.00	19.40	7	C	N
ATOM	8924	CA	PHE	C	366	-12.829	27.309	-10.231	1.00	19.49	6	C	C
ATOM	8925	C	PHE	C	366	-12.887	26.865	-8.761	1.00	18.23	6	C	C
ATOM	8926	O	PHE	C	366	-13.202	25.717	-8.540	1.00	19.63	8	C	O
ATOM	8927	CB	PHE	C	366	-14.284	27.766	-10.646	1.00	17.79	6	C	C
ATOM	8928	CG	PHE	C	366	-14.335	28.278	-12.074	1.00	20.43	6	C	C
ATOM	8929	CD1	PHE	C	366	-14.857	27.481	-13.095	1.00	19.19	6	C	C
ATOM	8930	CD2	PHE	C	366	-13.896	29.551	-12.396	1.00	20.24	6	C	C
ATOM	8931	CE1	PHE	C	366	-14.885	27.959	-14.399	1.00	19.99	6	C	C
ATOM	8932	CE2	PHE	C	366	-13.947	30.033	-13.692	1.00	19.28	6	C	C
ATOM	8933	CZ	PHE	C	366	-14.460	29.229	-14.699	1.00	19.77	6	C	C
ATOM	8934	N	SER	C	367	-12.743	27.789	-7.834	1.00	17.33	7	C	N
ATOM	8935	CA	SER	C	367	-12.917	27.562	-6.376	1.00	17.89	6	C	C
ATOM	8936	C	SER	C	367	-14.299	26.903	-6.230	1.00	18.89	6	C	C
ATOM	8937	O	SER	C	367	-15.206	27.519	-6.776	1.00	16.91	8	C	O
ATOM	8938	CB	SER	C	367	-12.918	28.893	-5.647	1.00	16.22	6	C	C
ATOM	8939	OG	SER	C	367	-11.703	29.661	-5.878	1.00	17.86	8	C	O
ATOM	8940	N	SER	C	368	-14.437	25.696	-5.781	1.00	17.19	7	C	N
ATOM	8941	CA	SER	C	368	-15.692	24.986	-5.790	1.00	20.14	6	C	C
ATOM	8942	C	SER	C	368	-15.881	24.015	-4.627	1.00	20.75	6	C	C
ATOM	8943	O	SER	C	368	-16.481	22.938	-4.810	1.00	20.21	8	C	O
ATOM	8944	CB	SER	C	368	-15.764	24.232	-7.142	1.00	20.65	6	C	C
ATOM	8945	OG	SER	C	368	-14.630	23.325	-7.273	1.00	18.65	8	C	O
ATOM	8946	N	ASP	C	369	-15.441	24.373	-3.419	1.00	19.58	7	C	N
ATOM	8947	CA	ASP	C	369	-15.837	23.622	-2.223	1.00	20.38	6	C	C
ATOM	8948	C	ASP	C	369	-17.343	23.742	-1.977	1.00	19.53	6	C	C
ATOM	8949	O	ASP	C	369	-18.012	22.828	-1.460	1.00	18.38	8	C	O
ATOM	8950	CB	ASP	C	369	-15.044	24.011	-0.983	1.00	19.73	6	C	C
ATOM	8951	CG	ASP	C	369	-13.590	23.560	-0.948	1.00	20.72	6	C	C
ATOM	8952	OD1	ASP	C	369	-12.743	23.995	-0.118	1.00	18.38	8	C	O
ATOM	8953	OD2	ASP	C	369	-13.279	22.602	-1.712	1.00	21.62	8	C	O
ATOM	8954	N	ASN	C	370	-17.919	24.895	-2.315	1.00	17.22	7	C	N
ATOM	8955	CA	ASN	C	370	-19.345	25.115	-2.139	1.00	18.46	6	C	C
ATOM	8956	C	ASN	C	370	-19.874	25.884	-3.356	1.00	17.66	6	C	C
ATOM	8957	O	ASN	C	370	-19.095	26.499	-4.081	1.00	18.22	8	C	O
ATOM	8958	CB	ASN	C	370	-19.692	25.848	-0.834	1.00	17.96	6	C	C
ATOM	8959	CG	ASN	C	370	-18.924	27.170	-0.769	1.00	19.88	6	C	C
ATOM	8960	OD1	ASN	C	370	-19.347	28.151	-1.411	1.00	20.08	8	C	O
ATOM	8961	ND2	ASN	C	370	-17.763	27.169	-0.111	1.00	17.47	7	C	N
ATOM	8962	N	LEU	C	371	-21.173	25.785	-3.588	1.00	17.06	7	C	N
ATOM	8963	CA	LEU	C	371	-21.806	26.366	-4.758	1.00	17.97	6	C	C
ATOM	8964	C	LEU	C	371	-21.712	27.885	-4.719	1.00	18.45	6	C	C
ATOM	8965	O	LEU	C	371	-21.661	28.485	-5.801	1.00	19.43	8	C	O
ATOM	8966	CB	LEU	C	371	-23.299	25.976	-4.856	1.00	19.10	6	C	C
ATOM	8967	CG	LEU	C	371	-23.997	26.419	-6.168	1.00	19.98	6	C	C
ATOM	8968	CD1	LEU	C	371	-23.283	25.880	-7.409	1.00	18.10	6	C	C
ATOM	8969	CD2	LEU	C	371	-25.457	26.006	-6.126	1.00	17.71	6	C	C
ATOM	8970	N	GLU	C	372	-21.801	28.439	-3.505	1.00	19.87	7	C	N
ATOM	8971	CA	GLU	C	372	-21.762	29.904	-3.430	1.00	21.44	6	C	C
ATOM	8972	C	GLU	C	372	-20.470	30.413	-4.032	1.00	21.42	6	C	C
ATOM	8973	O	GLU	C	372	-20.476	31.250	-4.927	1.00	22.71	8	C	O
ATOM	8974	CB	GLU	C	372	-21.870	30.381	-1.978	1.00	22.22	6	C	C
ATOM	8975	CG	GLU	C	372	-22.080	31.876	-1.822	1.00	25.57	6	C	C
ATOM	8976	CD	GLU	C	372	-22.357	32.197	-0.344	1.00	27.81	6	C	C
ATOM	8977	OE1	GLU	C	372	-21.424	32.317	0.462	1.00	27.39	8	C	O
ATOM	8978	OE2	GLU	C	372	-23.554	32.331	-0.015	1.00	31.68	8	C	O
ATOM	8979	N	GLU	C	373	-19.332	29.956	-3.494	1.00	21.55	7	C	N
ATOM	8980	CA	GLU	C	373	-18.055	30.427	-4.014	1.00	20.43	6	C	C
ATOM	8981	C	GLU	C	373	-17.894	30.060	-5.497	1.00	21.51	6	C	C
ATOM	8982	O	GLU	C	373	-17.196	30.789	-6.211	1.00	21.10	8	C	O
ATOM	8983	CB	GLU	C	373	-16.873	29.938	-3.191	1.00	19.87	6	C	C
ATOM	8984	CG	GLU	C	373	-16.592	28.441	-3.241	1.00	19.32	6	C	C
ATOM	8985	CD	GLU	C	373	-15.530	28.022	-2.239	1.00	21.59	6	C	C
ATOM	8986	OE1	GLU	C	373	-14.823	27.049	-2.542	1.00	19.31	8	C	O
ATOM	8987	OE2	GLU	C	373	-15.344	28.641	-1.143	1.00	19.82	8	C	O
ATOM	8988	N	LEU	C	374	-18.398	28.897	-5.924	1.00	21.24	7	C	N
ATOM	8989	CA	LEU	C	374	-18.305	28.498	-7.320	1.00	19.46	6	C	C
ATOM	8990	C	LEU	C	374	-19.074	29.481	-8.210	1.00	19.42	6	C	C
ATOM	8991	O	LEU	C	374	-18.600	29.882	-9.283	1.00	18.73	8	C	O
ATOM	8992	CB	LEU	C	374	-18.919	27.099	-7.528	1.00	18.40	6	C	C
ATOM	8993	CG	LEU	C	374	-18.998	26.565	-8.974	1.00	20.71	6	C	C
ATOM	8994	CD1	LEU	C	374	-17.651	26.635	-9.700	1.00	19.51	6	C	C
ATOM	8995	CD2	LEU	C	374	-19.416	25.097	-8.930	1.00	17.73	6	C	C
ATOM	8996	N	LYS	C	375	-20.322	29.783	-7.825	1.00	18.50	7	C	N
ATOM	8997	CA	LYS	C	375	-21.102	30.701	-8.659	1.00	19.64	6	C	C
ATOM	8998	C	LYS	C	375	-20.395	32.054	-8.753	1.00	21.35	6	C	C

115/188

ATOM	8999	O	LYS	C	375	-20.371	32.667	-9.822	1.00	19.89	8	C	O
ATOM	9000	CB	LYS	C	375	-22.509	30.917	-8.077	1.00	22.23	6	C	C
ATOM	9001	CG	LYS	C	375	-23.378	29.718	-8.496	1.00	22.60	6	C	C
ATOM	9002	CD	LYS	C	375	-24.711	29.745	-7.802	1.00	27.61	6	C	C
ATOM	9003	CE	LYS	C	375	-25.838	30.464	-8.487	1.00	30.41	6	C	C
ATOM	9004	NZ	LYS	C	375	-27.083	29.654	-8.121	1.00	36.04	7	C	N
ATOM	9005	N	GLN	C	376	-19.807	32.483	-7.645	1.00	21.66	7	C	N
ATOM	9006	CA	GLN	C	376	-19.121	33.774	-7.662	1.00	23.68	6	C	C
ATOM	9007	C	GLN	C	376	-17.872	33.720	-8.539	1.00	22.80	6	C	C
ATOM	9008	O	GLN	C	376	-17.621	34.695	-9.214	1.00	20.52	8	C	O
ATOM	9009	CB	GLN	C	376	-18.776	34.220	-6.244	1.00	25.61	6	C	C
ATOM	9010	CG	GLN	C	376	-19.980	34.722	-5.476	1.00	30.54	6	C	C
ATOM	9011	CD	GLN	C	376	-20.019	34.565	-3.980	1.00	36.40	6	C	C
ATOM	9012	OE1	GLN	C	376	-19.124	33.984	-3.347	1.00	39.17	8	C	O
ATOM	9013	NE2	GLN	C	376	-21.107	35.027	-3.323	1.00	37.02	7	C	N
ATOM	9014	N	ALA	C	377	-17.112	32.637	-8.495	1.00	20.50	7	C	N
ATOM	9015	CA	ALA	C	377	-15.908	32.500	-9.315	1.00	22.49	6	C	C
ATOM	9016	C	ALA	C	377	-16.272	32.518	-10.797	1.00	20.47	6	C	C
ATOM	9017	O	ALA	C	377	-15.703	33.202	-11.632	1.00	18.55	8	C	O
ATOM	9018	CB	ALA	C	377	-15.202	31.194	-8.939	1.00	19.51	6	C	C
ATOM	9019	N	VAL	C	378	-17.375	31.822	-11.121	1.00	18.74	7	C	N
ATOM	9020	CA	VAL	C	378	-17.809	31.752	-12.519	1.00	17.84	6	C	C
ATOM	9021	C	VAL	C	378	-18.322	33.100	-13.007	1.00	17.73	6	C	C
ATOM	9022	O	VAL	C	378	-17.936	33.543	-14.069	1.00	17.86	8	C	O
ATOM	9023	CB	VAL	C	378	-18.776	30.584	-12.764	1.00	16.53	6	C	C
ATOM	9024	CG1	VAL	C	378	-19.309	30.647	-14.204	1.00	17.28	6	C	C
ATOM	9025	CG2	VAL	C	378	-17.980	29.293	-12.524	1.00	14.16	6	C	C
ATOM	9026	N	ALA	C	379	-19.118	33.811	-12.262	1.00	20.09	7	C	N
ATOM	9027	CA	ALA	C	379	-19.642	35.115	-12.690	1.00	21.18	6	C	C
ATOM	9028	C	ALA	C	379	-18.472	36.033	-12.953	1.00	21.21	6	C	C
ATOM	9029	O	ALA	C	379	-18.402	36.850	-13.877	1.00	20.15	8	C	O
ATOM	9030	CB	ALA	C	379	-20.527	35.632	-11.550	1.00	21.12	6	C	C
ATOM	9031	N	LYS	C	380	-17.576	36.060	-11.967	1.00	21.75	7	C	N
ATOM	9032	CA	LYS	C	380	-16.387	36.907	-12.036	1.00	23.41	6	C	C
ATOM	9033	C	LYS	C	380	-15.574	36.574	-13.280	1.00	22.68	6	C	C
ATOM	9034	O	LYS	C	380	-15.121	37.497	-13.951	1.00	21.53	8	C	O
ATOM	9035	CB	LYS	C	380	-15.525	36.773	-10.766	1.00	26.91	6	C	C
ATOM	9036	CG	LYS	C	380	-14.226	37.537	-10.950	1.00	33.35	6	C	C
ATOM	9037	CD	LYS	C	380	-13.369	37.646	-9.713	1.00	38.51	6	C	C
ATOM	9038	CE	LYS	C	380	-12.450	36.435	-9.602	1.00	40.60	6	C	C
ATOM	9039	NZ	LYS	C	380	-11.189	36.645	-10.409	1.00	41.38	7	C	N
ATOM	9040	N	HIS	C	381	-15.372	35.300	-13.589	1.00	20.22	7	C	N
ATOM	9041	CA	HIS	C	381	-14.612	34.899	-14.784	1.00	20.41	6	C	C
ATOM	9042	C	HIS	C	381	-15.327	35.316	-16.053	1.00	20.32	6	C	C
ATOM	9043	O	HIS	C	381	-14.807	35.834	-17.030	1.00	18.94	8	C	O
ATOM	9044	CB	HIS	C	381	-14.495	33.353	-14.741	1.00	21.14	6	C	C
ATOM	9045	CG	HIS	C	381	-13.774	32.857	-15.955	1.00	21.83	6	C	C
ATOM	9046	ND1	HIS	C	381	-12.415	32.959	-16.073	1.00	21.03	7	C	N
ATOM	9047	CD2	HIS	C	381	-14.212	32.250	-17.067	1.00	22.61	6	C	C
ATOM	9048	CE1	HIS	C	381	-12.031	32.443	-17.213	1.00	23.13	6	C	C
ATOM	9049	NE2	HIS	C	381	-13.096	32.000	-17.853	1.00	23.41	7	C	N
ATOM	9050	N	ARG	C	382	-16.653	35.138	-16.076	1.00	21.28	7	C	N
ATOM	9051	CA	ARG	C	382	-17.450	35.589	-17.215	1.00	23.27	6	C	C
ATOM	9052	C	ARG	C	382	-17.303	37.102	-17.414	1.00	24.91	6	C	C
ATOM	9053	O	ARG	C	382	-17.233	37.554	-18.566	1.00	24.19	8	C	O
ATOM	9054	CB	ARG	C	382	-18.949	35.296	-17.038	1.00	22.90	6	C	C
ATOM	9055	CG	ARG	C	382	-19.234	33.812	-17.277	1.00	24.80	6	C	C
ATOM	9056	CD	ARG	C	382	-20.683	33.431	-17.015	1.00	25.66	6	C	C
ATOM	9057	NE	ARG	C	382	-20.920	32.103	-17.634	1.00	26.23	7	C	N
ATOM	9058	CZ	ARG	C	382	-21.776	31.251	-17.137	1.00	28.45	6	C	C
ATOM	9059	NH1	ARG	C	382	-22.422	31.635	-16.000	1.00	30.10	7	C	N
ATOM	9060	NH2	ARG	C	382	-21.938	30.094	-17.766	1.00	24.13	7	C	N
ATOM	9061	N	ASP	C	383	-17.242	37.852	-16.301	1.00	23.44	7	C	N
ATOM	9062	CA	ASP	C	383	-17.121	39.300	-16.452	1.00	25.69	6	C	C
ATOM	9063	C	ASP	C	383	-15.758	39.652	-17.079	1.00	25.84	6	C	C
ATOM	9064	O	ASP	C	383	-15.661	40.498	-17.970	1.00	25.29	8	C	O
ATOM	9065	CB	ASP	C	383	-17.234	39.999	-15.098	1.00	29.59	6	C	C
ATOM	9066	CG	ASP	C	383	-17.307	41.513	-15.267	1.00	34.11	6	C	C
ATOM	9067	OD1	ASP	C	383	-16.396	42.267	-14.886	1.00	36.36	8	C	O
ATOM	9068	OD2	ASP	C	383	-18.309	41.968	-15.850	1.00	36.66	8	C	O
ATOM	9069	N	TYR	C	384	-14.714	39.030	-16.580	1.00	21.51	7	C	N
ATOM	9070	CA	TYR	C	384	-13.347	39.232	-17.052	1.00	23.26	6	C	C
ATOM	9071	C	TYR	C	384	-13.318	38.930	-18.548	1.00	23.06	6	C	C
ATOM	9072	O	TYR	C	384	-12.737	39.636	-19.368	1.00	21.13	8	C	O
ATOM	9073	CB	TYR	C	384	-12.328	38.367	-16.250	1.00	20.09	6	C	C
ATOM	9074	CG	TYR	C	384	-10.919	38.634	-16.754	1.00	20.83	6	C	C
ATOM	9075	CD1	TYR	C	384	-10.140	39.646	-16.206	1.00	21.86	6	C	C
ATOM	9076	CD2	TYR	C	384	-10.390	37.910	-17.816	1.00	20.50	6	C	C
ATOM	9077	CE1	TYR	C	384	-8.858	39.914	-16.659	1.00	21.12	6	C	C

ATOM	9078	CE2	TYR	C	384	-9.131	38.167	-18.327	1.00	20.51	6	C	C
ATOM	9079	CZ	TYR	C	384	-8.397	39.176	-17.733	1.00	22.13	6	C	C
ATOM	9080	OH	TYR	C	384	-7.149	39.429	-18.236	1.00	23.60	8	C	O
ATOM	9081	N	THR	C	385	-13.875	37.760	-18.900	1.00	24.11	7	C	N
ATOM	9082	CA	THR	C	385	-13.928	37.307	-20.289	1.00	21.98	6	C	C
ATOM	9083	C	THR	C	385	-14.603	38.353	-21.173	1.00	24.05	6	C	C
ATOM	9084	O	THR	C	385	-14.113	38.755	-22.223	1.00	23.10	8	C	O
ATOM	9085	CB	THR	C	385	-14.712	35.990	-20.367	1.00	22.54	6	C	C
ATOM	9086	OG1	THR	C	385	-13.891	34.980	-19.723	1.00	22.43	8	C	O
ATOM	9087	CG2	THR	C	385	-14.987	35.510	-21.799	1.00	21.11	6	C	C
ATOM	9088	N	LYS	C	386	-15.780	38.783	-20.736	1.00	24.41	7	C	N
ATOM	9089	CA	LYS	C	386	-16.554	39.768	-21.482	1.00	26.58	6	C	C
ATOM	9090	C	LYS	C	386	-15.770	41.050	-21.678	1.00	26.09	6	C	C
ATOM	9091	O	LYS	C	386	-15.860	41.643	-22.759	1.00	25.68	8	C	O
ATOM	9092	CB	LYS	C	386	-17.835	40.004	-20.683	1.00	30.44	6	C	C
ATOM	9093	CG	LYS	C	386	-18.526	41.305	-20.997	1.00	36.72	6	C	C
ATOM	9094	CD	LYS	C	386	-19.741	41.141	-21.878	1.00	39.60	6	C	C
ATOM	9095	CE	LYS	C	386	-20.837	42.052	-21.283	1.00	43.59	6	C	C
ATOM	9096	NZ	LYS	C	386	-20.448	43.498	-21.360	1.00	45.37	7	C	N
ATOM	9097	N	ASN	C	387	-14.942	41.433	-20.705	1.00	26.07	7	C	N
ATOM	9098	CA	ASN	C	387	-14.225	42.704	-20.829	1.00	27.19	6	C	C
ATOM	9099	C	ASN	C	387	-12.798	42.563	-21.328	1.00	25.84	6	C	C
ATOM	9100	O	ASN	C	387	-12.094	43.563	-21.427	1.00	25.45	8	C	O
ATOM	9101	CB	ASN	C	387	-14.347	43.470	-19.508	1.00	28.96	6	C	C
ATOM	9102	CG	ASN	C	387	-15.816	43.879	-19.321	1.00	33.53	6	C	C
ATOM	9103	OD1	ASN	C	387	-16.310	44.791	-20.004	1.00	34.90	8	C	O
ATOM	9104	ND2	ASN	C	387	-16.579	43.255	-18.443	1.00	32.01	7	C	N
ATOM	9105	N	TYR	C	388	-12.326	41.386	-21.688	1.00	23.49	7	C	N
ATOM	9106	CA	TYR	C	388	-10.940	41.223	-22.160	1.00	23.56	6	C	C
ATOM	9107	C	TYR	C	388	-10.600	42.062	-23.373	1.00	25.71	6	C	C
ATOM	9108	O	TYR	C	388	-9.429	42.522	-23.489	1.00	28.11	8	C	O
ATOM	9109	CB	TYR	C	388	-10.682	39.745	-22.504	1.00	21.12	6	C	C
ATOM	9110	CG	TYR	C	388	-9.241	39.413	-22.829	1.00	23.02	6	C	C
ATOM	9111	CD1	TYR	C	388	-8.279	39.282	-21.805	1.00	22.63	6	C	C
ATOM	9112	CD2	TYR	C	388	-8.834	39.229	-24.131	1.00	23.29	6	C	C
ATOM	9113	CE1	TYR	C	388	-6.970	38.999	-22.098	1.00	22.15	6	C	C
ATOM	9114	CE2	TYR	C	388	-7.502	38.947	-24.404	1.00	23.32	6	C	C
ATOM	9115	CZ	TYR	C	388	-6.575	38.838	-23.387	1.00	22.17	6	C	C
ATOM	9116	OH	TYR	C	388	-5.277	38.530	-23.755	1.00	23.75	8	C	O
ATOM	9117	OT	TYR	C	388	-11.459	42.261	-24.263	1.00	25.65	8	C	O
ATOM	9119	N	MET	D	1	3.660	3.910	-15.860	1.00	19.33	7	D	N
ATOM	9120	CA	MET	D	1	4.575	4.811	-16.616	1.00	20.90	6	D	C
ATOM	9121	C	MET	D	1	3.864	6.149	-16.896	1.00	21.14	6	D	C
ATOM	9122	O	MET	D	1	2.669	6.199	-17.174	1.00	19.92	8	D	O
ATOM	9123	CB	MET	D	1	5.086	4.226	-17.903	1.00	23.17	6	D	C
ATOM	9124	CG	MET	D	1	6.338	4.916	-18.467	1.00	23.91	6	D	C
ATOM	9125	SE	MET	D	1	5.349	5.827	-20.079	1.00	49.36	34	D	SE
ATOM	9126	CE2	MET	D	1	5.286	4.387	-21.228	1.00	12.50	6	D	C
ATOM	9127	N	ARG	D	2	4.604	7.212	-16.703	1.00	18.98	7	D	N
ATOM	9128	CA	ARG	D	2	4.059	8.557	-16.859	1.00	19.38	6	D	C
ATOM	9129	C	ARG	D	2	5.130	9.501	-17.371	1.00	20.05	6	D	C
ATOM	9130	O	ARG	D	2	6.303	9.081	-17.481	1.00	20.78	8	D	O
ATOM	9131	CB	ARG	D	2	3.431	8.993	-15.540	1.00	20.39	6	D	C
ATOM	9132	CG	ARG	D	2	4.480	9.081	-14.442	1.00	19.13	6	D	C
ATOM	9133	CD	ARG	D	2	3.755	9.193	-13.081	1.00	18.54	6	D	C
ATOM	9134	NE	ARG	D	2	4.783	8.992	-12.091	1.00	17.16	7	D	N
ATOM	9135	CZ	ARG	D	2	4.849	9.374	-10.832	1.00	15.25	6	D	C
ATOM	9136	NH1	ARG	D	2	5.907	8.914	-10.201	1.00	14.44	7	D	N
ATOM	9137	NH2	ARG	D	2	3.934	10.109	-10.247	1.00	16.21	7	D	N
ATOM	9138	N	TYR	D	3	4.734	10.716	-17.770	1.00	16.64	7	D	N
ATOM	9139	CA	TYR	D	3	5.784	11.588	-18.336	1.00	17.69	6	D	C
ATOM	9140	C	TYR	D	3	5.256	13.016	-18.412	1.00	17.84	6	D	C
ATOM	9141	O	TYR	D	3	4.033	13.192	-18.324	1.00	15.03	8	D	O
ATOM	9142	CB	TYR	D	3	6.140	11.113	-19.756	1.00	15.50	6	D	C
ATOM	9143	CG	TYR	D	3	4.962	11.002	-20.723	1.00	17.94	6	D	C
ATOM	9144	CD1	TYR	D	3	4.623	12.059	-21.563	1.00	18.85	6	D	C
ATOM	9145	CD2	TYR	D	3	4.172	9.868	-20.762	1.00	18.42	6	D	C
ATOM	9146	CE1	TYR	D	3	3.544	11.927	-22.420	1.00	20.09	6	D	C
ATOM	9147	CE2	TYR	D	3	3.082	9.746	-21.602	1.00	20.59	6	D	C
ATOM	9148	CZ	TYR	D	3	2.776	10.800	-22.445	1.00	21.15	6	D	C
ATOM	9149	OH	TYR	D	3	1.687	10.749	-23.282	1.00	23.33	8	D	O
ATOM	9150	N	LEU	D	4	6.170	13.960	-18.601	1.00	17.03	7	D	N
ATOM	9151	CA	LEU	D	4	5.769	15.347	-18.826	1.00	15.78	6	D	C
ATOM	9152	C	LEU	D	4	6.662	15.902	-19.962	1.00	17.86	6	D	C
ATOM	9153	O	LEU	D	4	7.825	15.513	-19.982	1.00	14.91	8	D	O
ATOM	9154	CB	LEU	D	4	6.011	16.229	-17.592	1.00	15.48	6	D	C
ATOM	9155	CG	LEU	D	4	5.062	15.891	-16.377	1.00	15.40	6	D	C
ATOM	9156	CD1	LEU	D	4	5.655	16.542	-15.135	1.00	14.20	6	D	C
ATOM	9157	CD2	LEU	D	4	3.685	16.417	-16.678	1.00	13.89	6	D	C

117/188

ATOM	9158	N	THR	D	5	6.152	16.732	-20.873	1.00	16.03	7	D	N
ATOM	9159	CA	THR	D	5	7.004	17.348	-21.900	1.00	15.64	6	D	C
ATOM	9160	C	THR	D	5	7.077	18.827	-21.521	1.00	15.27	6	D	C
ATOM	9161	O	THR	D	5	6.175	19.379	-20.868	1.00	13.23	8	D	O
ATOM	9162	CB	THR	D	5	6.435	17.247	-23.311	1.00	16.91	6	D	C
ATOM	9163	OG1	THR	D	5	5.164	17.930	-23.348	1.00	20.24	8	D	O
ATOM	9164	CG2	THR	D	5	6.181	15.782	-23.714	1.00	18.73	6	D	C
ATOM	9165	N	ALA	D	6	8.100	19.548	-21.948	1.00	15.57	7	D	N
ATOM	9166	CA	ALA	D	6	8.227	20.952	-21.633	1.00	11.79	6	D	C
ATOM	9167	C	ALA	D	6	9.081	21.608	-22.708	1.00	16.56	6	D	C
ATOM	9168	O	ALA	D	6	9.796	20.930	-23.440	1.00	18.68	8	D	O
ATOM	9169	CB	ALA	D	6	8.959	21.032	-20.274	1.00	14.11	6	D	C
ATOM	9170	N	GLY	D	7	9.037	22.923	-22.791	1.00	18.41	7	D	N
ATOM	9171	CA	GLY	D	7	9.815	23.687	-23.765	1.00	17.03	6	D	C
ATOM	9172	C	GLY	D	7	8.871	24.602	-24.536	1.00	18.74	6	D	C
ATOM	9173	O	GLY	D	7	7.666	24.373	-24.722	1.00	20.31	8	D	O
ATOM	9174	N	GLU	D	8	9.435	25.656	-25.085	1.00	19.65	7	D	N
ATOM	9175	CA	GLU	D	8	8.783	26.650	-25.905	1.00	18.89	6	D	C
ATOM	9176	C	GLU	D	8	9.354	26.611	-27.322	1.00	20.13	6	D	C
ATOM	9177	O	GLU	D	8	10.522	26.258	-27.479	1.00	20.53	8	D	O
ATOM	9178	CB	GLU	D	8	8.996	28.059	-25.328	1.00	18.12	6	D	C
ATOM	9179	CG	GLU	D	8	7.971	28.405	-24.261	1.00	19.59	6	D	C
ATOM	9180	CD	GLU	D	8	8.351	27.725	-22.924	1.00	22.79	6	D	C
ATOM	9181	OE1	GLU	D	8	9.557	27.720	-22.607	1.00	20.84	8	D	O
ATOM	9182	OE2	GLU	D	8	7.452	27.183	-22.238	1.00	24.20	8	D	O
ATOM	9183	N	SER	D	9	8.510	26.928	-28.320	1.00	20.23	7	D	N
ATOM	9184	CA	SER	D	9	8.934	26.822	-29.695	1.00	20.14	6	D	C
ATOM	9185	C	SER	D	9	10.279	27.547	-29.914	1.00	21.39	6	D	C
ATOM	9186	O	SER	D	9	11.148	26.942	-30.524	1.00	19.93	8	D	O
ATOM	9187	CB	SER	D	9	7.917	27.458	-30.667	1.00	22.11	6	D	C
ATOM	9188	OG	SER	D	9	8.403	27.178	-31.976	1.00	24.22	8	D	O
ATOM	9189	N	HIS	D	10	10.304	28.794	-29.417	1.00	20.73	7	D	N
ATOM	9190	CA	HIS	D	10	11.535	29.556	-29.587	1.00	23.69	6	D	C
ATOM	9191	C	HIS	D	10	12.321	29.726	-28.280	1.00	22.77	6	D	C
ATOM	9192	O	HIS	D	10	13.338	30.435	-28.290	1.00	24.98	8	D	O
ATOM	9193	CB	HIS	D	10	11.259	30.919	-30.270	1.00	22.79	6	D	C
ATOM	9194	CG	HIS	D	10	10.418	30.700	-31.506	1.00	24.07	6	D	C
ATOM	9195	ND1	HIS	D	10	9.112	31.103	-31.595	1.00	22.50	7	D	N
ATOM	9196	CD2	HIS	D	10	10.776	30.123	-32.683	1.00	22.38	6	D	C
ATOM	9197	CE1	HIS	D	10	8.666	30.739	-32.802	1.00	24.13	6	D	C
ATOM	9198	NE2	HIS	D	10	9.657	30.136	-33.470	1.00	22.38	7	D	N
ATOM	9199	N	GLY	D	11	12.171	28.796	-27.352	1.00	24.15	7	D	N
ATOM	9200	CA	GLY	D	11	12.991	28.702	-26.162	1.00	20.28	6	D	C
ATOM	9201	C	GLY	D	11	14.328	28.023	-26.511	1.00	21.79	6	D	C
ATOM	9202	O	GLY	D	11	14.566	27.609	-27.645	1.00	21.13	8	D	O
ATOM	9203	N	PRO	D	12	15.193	27.818	-25.508	1.00	21.54	7	D	N
ATOM	9204	CA	PRO	D	12	16.504	27.256	-25.709	1.00	21.74	6	D	C
ATOM	9205	C	PRO	D	12	16.420	25.780	-26.081	1.00	21.34	6	D	C
ATOM	9206	O	PRO	D	12	17.225	25.286	-26.841	1.00	19.12	8	D	O
ATOM	9207	CB	PRO	D	12	17.237	27.413	-24.362	1.00	21.56	6	D	C
ATOM	9208	CG	PRO	D	12	16.194	27.791	-23.369	1.00	22.59	6	D	C
ATOM	9209	CD	PRO	D	12	15.008	28.345	-24.129	1.00	22.16	6	D	C
ATOM	9210	N	ARG	D	13	15.438	25.054	-25.521	1.00	19.41	7	D	N
ATOM	9211	CA	ARG	D	13	15.389	23.630	-25.808	1.00	20.36	6	D	C
ATOM	9212	C	ARG	D	13	14.111	22.988	-25.275	1.00	17.14	6	D	C
ATOM	9213	O	ARG	D	13	13.401	23.624	-24.556	1.00	16.61	8	D	O
ATOM	9214	CB	ARG	D	13	16.607	22.936	-25.180	1.00	22.48	6	D	C
ATOM	9215	CG	ARG	D	13	16.688	22.640	-23.738	1.00	27.75	6	D	C
ATOM	9216	CD	ARG	D	13	17.319	21.262	-23.402	1.00	26.50	6	D	C
ATOM	9217	NE	ARG	D	13	16.853	20.998	-22.027	1.00	25.14	7	D	N
ATOM	9218	CZ	ARG	D	13	17.444	21.230	-20.870	1.00	23.76	6	D	C
ATOM	9219	NH1	ARG	D	13	18.679	21.718	-20.763	1.00	21.26	7	D	N
ATOM	9220	NH2	ARG	D	13	16.751	20.991	-19.765	1.00	22.74	7	D	N
ATOM	9221	N	LEU	D	14	13.879	21.774	-25.684	1.00	15.68	7	D	N
ATOM	9222	CA	LEU	D	14	12.699	21.034	-25.255	1.00	17.42	6	D	C
ATOM	9223	C	LEU	D	14	13.239	19.927	-24.332	1.00	17.15	6	D	C
ATOM	9224	O	LEU	D	14	14.352	19.482	-24.582	1.00	14.07	8	D	O
ATOM	9225	CB	LEU	D	14	11.987	20.416	-26.446	1.00	13.94	6	D	C
ATOM	9226	CG	LEU	D	14	11.853	21.324	-27.687	1.00	16.40	6	D	C
ATOM	9227	CD1	LEU	D	14	11.141	20.545	-28.766	1.00	14.50	6	D	C
ATOM	9228	CD2	LEU	D	14	11.066	22.618	-27.385	1.00	15.64	6	D	C
ATOM	9229	N	THR	D	15	12.412	19.514	-23.395	1.00	15.45	7	D	N
ATOM	9230	CA	THR	D	15	12.746	18.497	-22.429	1.00	16.02	6	D	C
ATOM	9231	C	THR	D	15	11.546	17.591	-22.196	1.00	16.69	6	D	C
ATOM	9232	O	THR	D	15	10.399	18.041	-22.184	1.00	20.16	8	D	O
ATOM	9233	CB	THR	D	15	13.174	19.107	-21.073	1.00	15.55	6	D	C
ATOM	9234	OG1	THR	D	15	14.065	20.219	-21.294	1.00	15.11	8	D	O
ATOM	9235	CG2	THR	D	15	13.971	18.151	-20.198	1.00	14.97	6	D	C
ATOM	9236	N	ALA	D	16	11.778	16.327	-21.940	1.00	17.43	7	D	N

118/188

ATOM	9237	CA	ALA	D	16	10.779	15.394	-21.503	1.00	17.27	6	D	C
ATOM	9238	C	ALA	D	16	11.396	14.524	-20.399	1.00	17.41	6	D	C
ATOM	9239	O	ALA	D	16	12.570	14.249	-20.488	1.00	16.80	8	D	O
ATOM	9240	CB	ALA	D	16	10.307	14.482	-22.632	1.00	16.01	6	D	C
ATOM	9241	N	ILE	D	17	10.583	14.117	-19.417	1.00	13.84	7	D	N
ATOM	9242	CA	ILE	D	17	11.006	13.202	-18.402	1.00	15.03	6	D	C
ATOM	9243	C	ILE	D	17	10.015	12.039	-18.441	1.00	15.94	6	D	C
ATOM	9244	O	ILE	D	17	8.786	12.280	-18.398	1.00	16.02	8	D	O
ATOM	9245	CB	ILE	D	17	11.076	13.795	-16.974	1.00	15.51	6	D	C
ATOM	9246	CG1	ILE	D	17	12.171	14.857	-16.867	1.00	15.65	6	D	C
ATOM	9247	CG2	ILE	D	17	11.318	12.664	-15.974	1.00	17.47	6	D	C
ATOM	9248	CD1	ILE	D	17	12.205	15.572	-15.509	1.00	16.99	6	D	C
ATOM	9249	N	ILE	D	18	10.485	10.821	-18.575	1.00	16.54	7	D	N
ATOM	9250	CA	ILE	D	18	9.623	9.641	-18.490	1.00	18.97	6	D	C
ATOM	9251	C	ILE	D	18	9.950	8.862	-17.195	1.00	19.90	6	D	C
ATOM	9252	O	ILE	D	18	11.075	8.437	-17.010	1.00	18.25	8	D	O
ATOM	9253	CB	ILE	D	18	9.872	8.649	-19.633	1.00	19.11	6	D	C
ATOM	9254	CG1	ILE	D	18	9.816	9.404	-20.962	1.00	18.24	6	D	C
ATOM	9255	CG2	ILE	D	18	8.873	7.503	-19.546	1.00	20.19	6	D	C
ATOM	9256	CD1	ILE	D	18	10.323	8.510	-22.093	1.00	18.77	6	D	C
ATOM	9257	N	GLU	D	19	8.958	8.633	-16.328	1.00	17.78	7	D	N
ATOM	9258	CA	GLU	D	19	9.101	7.941	-15.080	1.00	17.20	6	D	C
ATOM	9259	C	GLU	D	19	8.356	6.617	-15.197	1.00	17.23	6	D	C
ATOM	9260	O	GLU	D	19	7.176	6.560	-15.599	1.00	18.08	8	D	O
ATOM	9261	CB	GLU	D	19	8.560	8.802	-13.917	1.00	19.21	6	D	C
ATOM	9262	CG	GLU	D	19	8.889	8.369	-12.500	1.00	18.39	6	D	C
ATOM	9263	CD	GLU	D	19	8.226	7.083	-12.065	1.00	20.36	6	D	C
ATOM	9264	OE1	GLU	D	19	6.986	7.010	-12.027	1.00	21.59	8	D	O
ATOM	9265	OE2	GLU	D	19	8.980	6.129	-11.734	1.00	18.69	8	D	O
ATOM	9266	N	GLY	D	20	9.029	5.524	-14.883	1.00	17.88	7	D	N
ATOM	9267	CA	GLY	D	20	8.361	4.218	-14.874	1.00	17.82	6	D	C
ATOM	9268	C	GLY	D	20	8.694	3.271	-16.001	1.00	19.47	6	D	C
ATOM	9269	O	GLY	D	20	7.980	2.263	-16.110	1.00	20.73	8	D	O
ATOM	9270	N	ILE	D	21	9.678	3.556	-16.854	1.00	18.07	7	D	N
ATOM	9271	CA	ILE	D	21	10.123	2.551	-17.839	1.00	18.99	6	D	C
ATOM	9272	C	ILE	D	21	10.822	1.444	-17.080	1.00	18.87	6	D	C
ATOM	9273	O	ILE	D	21	11.659	1.716	-16.199	1.00	16.85	8	D	O
ATOM	9274	CB	ILE	D	21	11.117	3.208	-18.822	1.00	20.15	6	D	C
ATOM	9275	CG1	ILE	D	21	10.330	4.245	-19.660	1.00	22.33	6	D	C
ATOM	9276	CG2	ILE	D	21	11.814	2.217	-19.734	1.00	21.46	6	D	C
ATOM	9277	CD1	ILE	D	21	9.217	3.637	-20.492	1.00	21.43	6	D	C
ATOM	9278	N	PRO	D	22	10.646	0.166	-17.441	1.00	18.82	7	D	N
ATOM	9279	CA	PRO	D	22	11.344	-0.879	-16.752	1.00	18.40	6	D	C
ATOM	9280	C	PRO	D	22	12.844	-0.743	-16.965	1.00	18.96	6	D	C
ATOM	9281	O	PRO	D	22	13.367	-0.284	-17.976	1.00	17.60	8	D	O
ATOM	9282	CB	PRO	D	22	10.866	-2.182	-17.381	1.00	20.06	6	D	C
ATOM	9283	CG	PRO	D	22	9.923	-1.823	-18.458	1.00	19.69	6	D	C
ATOM	9284	CD	PRO	D	22	9.667	-0.320	-18.420	1.00	19.39	6	D	C
ATOM	9285	N	ALA	D	23	13.578	-1.309	-15.996	1.00	19.36	7	D	N
ATOM	9286	CA	ALA	D	23	15.006	-1.413	-16.064	1.00	17.40	6	D	C
ATOM	9287	C	ALA	D	23	15.338	-2.485	-17.099	1.00	18.39	6	D	C
ATOM	9288	O	ALA	D	23	14.561	-3.435	-17.282	1.00	19.45	8	D	O
ATOM	9289	CB	ALA	D	23	15.580	-1.930	-14.730	1.00	17.65	6	D	C
ATOM	9290	N	GLY	D	24	16.504	-2.374	-17.716	1.00	17.75	7	D	N
ATOM	9291	CA	GLY	D	24	16.935	-3.408	-18.653	1.00	17.82	6	D	C
ATOM	9292	C	GLY	D	24	16.568	-3.158	-20.086	1.00	20.62	6	D	C
ATOM	9293	O	GLY	D	24	16.919	-4.035	-20.878	1.00	19.04	8	D	O
ATOM	9294	N	LEU	D	25	15.926	-2.041	-20.460	1.00	18.65	7	D	N
ATOM	9295	CA	LEU	D	25	15.549	-1.958	-21.906	1.00	19.37	6	D	C
ATOM	9296	C	LEU	D	25	16.684	-1.462	-22.761	1.00	19.71	6	D	C
ATOM	9297	O	LEU	D	25	17.117	-0.319	-22.513	1.00	15.98	8	D	O
ATOM	9298	CB	LEU	D	25	14.338	-0.972	-21.971	1.00	18.13	6	D	C
ATOM	9299	CG	LEU	D	25	13.806	-0.652	-23.384	1.00	20.99	6	D	C
ATOM	9300	CD1	LEU	D	25	13.201	-1.864	-24.062	1.00	19.33	6	D	C
ATOM	9301	CD2	LEU	D	25	12.829	0.524	-23.346	1.00	19.89	6	D	C
ATOM	9302	N	PRO	D	26	17.183	-2.138	-23.798	1.00	21.64	7	D	N
ATOM	9303	CA	PRO	D	26	18.218	-1.529	-24.632	1.00	21.67	6	D	C
ATOM	9304	C	PRO	D	26	17.642	-0.266	-25.256	1.00	22.54	6	D	C
ATOM	9305	O	PRO	D	26	16.545	-0.311	-25.885	1.00	21.66	8	D	O
ATOM	9306	CB	PRO	D	26	18.547	-2.584	-25.685	1.00	23.02	6	D	C
ATOM	9307	CG	PRO	D	26	17.953	-3.871	-25.162	1.00	23.98	6	D	C
ATOM	9308	CD	PRO	D	26	16.804	-3.484	-24.241	1.00	22.32	6	D	C
ATOM	9309	N	LEU	D	27	18.370	0.830	-25.215	1.00	20.94	7	D	N
ATOM	9310	CA	LEU	D	27	17.897	2.092	-25.738	1.00	21.32	6	D	C
ATOM	9311	C	LEU	D	27	19.085	2.994	-26.077	1.00	23.01	6	D	C
ATOM	9312	O	LEU	D	27	19.868	3.316	-25.189	1.00	20.11	8	D	O
ATOM	9313	CB	LEU	D	27	17.066	2.860	-24.694	1.00	21.74	6	D	C
ATOM	9314	CG	LEU	D	27	16.436	4.200	-25.045	1.00	20.56	6	D	C
ATOM	9315	CD1	LEU	D	27	15.335	4.041	-26.089	1.00	20.13	6	D	C

119/188

ATOM	9316	CD2	LEU	D	27	15.778	4.801	-23.759	1.00	18.17	6	D	C
ATOM	9317	N	THR	D	28	19.057	3.462	-27.344	1.00	22.67	7	D	N
ATOM	9318	CA	THR	D	28	20.098	4.343	-27.799	1.00	24.86	6	D	C
ATOM	9319	C	THR	D	28	19.500	5.639	-28.325	1.00	22.58	6	D	C
ATOM	9320	O	THR	D	28	18.309	5.708	-28.518	1.00	20.85	8	D	O
ATOM	9321	CB	THR	D	28	20.865	3.708	-28.989	1.00	27.34	6	D	C
ATOM	9322	OG1	THR	D	28	19.966	3.579	-30.101	1.00	28.29	8	D	O
ATOM	9323	CG2	THR	D	28	21.441	2.361	-28.601	1.00	28.97	6	D	C
ATOM	9324	N	ALA	D	29	20.348	6.638	-28.517	1.00	24.55	7	D	N
ATOM	9325	CA	ALA	D	29	19.874	7.901	-29.112	1.00	23.18	6	D	C
ATOM	9326	C	ALA	D	29	19.363	7.672	-30.527	1.00	23.28	6	D	C
ATOM	9327	O	ALA	D	29	18.357	8.257	-30.884	1.00	22.73	8	D	O
ATOM	9328	CB	ALA	D	29	20.977	8.944	-29.119	1.00	22.61	6	D	C
ATOM	9329	N	GLU	D	30	19.948	6.779	-31.330	1.00	25.04	7	D	N
ATOM	9330	CA	GLU	D	30	19.478	6.505	-32.670	1.00	24.45	6	D	C
ATOM	9331	C	GLU	D	30	18.050	5.944	-32.630	1.00	24.60	6	D	C
ATOM	9332	O	GLU	D	30	17.296	6.162	-33.575	1.00	20.73	8	D	O
ATOM	9333	CB	GLU	D	30	20.320	5.543	-33.503	1.00	27.40	6	D	C
ATOM	9334	CG	GLU	D	30	19.716	5.246	-34.869	1.00	32.81	6	D	C
ATOM	9335	CD	GLU	D	30	19.390	6.435	-35.750	1.00	34.98	6	D	C
ATOM	9336	OE1	GLU	D	30	18.448	6.353	-36.564	1.00	36.42	8	D	O
ATOM	9337	OE2	GLU	D	30	20.017	7.508	-35.755	1.00	36.54	8	D	O
ATOM	9338	N	ASP	D	31	17.740	5.218	-31.551	1.00	25.70	7	D	N
ATOM	9339	CA	ASP	D	31	16.371	4.748	-31.400	1.00	26.66	6	D	C
ATOM	9340	C	ASP	D	31	15.387	5.925	-31.385	1.00	26.89	6	D	C
ATOM	9341	O	ASP	D	31	14.202	5.733	-31.710	1.00	30.45	8	D	O
ATOM	9342	CB	ASP	D	31	16.199	3.943	-30.135	1.00	26.23	6	D	C
ATOM	9343	CG	ASP	D	31	16.832	2.566	-30.177	1.00	26.40	6	D	C
ATOM	9344	OD1	ASP	D	31	16.865	1.903	-31.228	1.00	26.26	8	D	O
ATOM	9345	OD2	ASP	D	31	17.252	2.166	-29.084	1.00	24.51	8	D	O
ATOM	9346	N	ILE	D	32	15.838	7.081	-30.937	1.00	26.17	7	D	N
ATOM	9347	CA	ILE	D	32	14.932	8.239	-30.856	1.00	24.86	6	D	C
ATOM	9348	C	ILE	D	32	15.027	9.097	-32.122	1.00	24.62	6	D	C
ATOM	9349	O	ILE	D	32	14.007	9.574	-32.640	1.00	20.94	8	D	O
ATOM	9350	CB	ILE	D	32	15.283	9.154	-29.668	1.00	24.94	6	D	C
ATOM	9351	CG1AILE	D	32	15.506	8.361	-28.380	0.50	23.40	6	D	C	
ATOM	9352	CG1BILE	D	32	15.265	8.346	-28.358	0.50	25.77	6	D	C	
ATOM	9353	CG2AILE	D	32	14.220	10.229	-29.431	0.50	22.47	6	D	C	
ATOM	9354	CG2BILE	D	32	14.330	10.336	-29.507	0.50	23.21	6	D	C	
ATOM	9355	CD1AILE	D	32	14.363	7.509	-27.884	0.50	21.65	6	D	C	
ATOM	9356	CD1BILE	D	32	16.694	7.971	-28.069	0.50	28.09	6	D	C	
ATOM	9357	N	ASN	D	33	16.288	9.278	-32.573	1.00	23.81	7	D	N
ATOM	9358	CA	ASN	D	33	16.526	10.177	-33.714	1.00	23.83	6	D	C
ATOM	9359	C	ASN	D	33	15.816	9.751	-34.986	1.00	24.11	6	D	C
ATOM	9360	O	ASN	D	33	15.378	10.624	-35.734	1.00	23.25	8	D	O
ATOM	9361	CB	ASN	D	33	18.036	10.372	-33.950	1.00	24.15	6	D	C
ATOM	9362	CG	ASN	D	33	18.752	11.000	-32.775	1.00	24.54	6	D	C
ATOM	9363	OD1	ASN	D	33	19.999	10.914	-32.694	1.00	26.78	8	D	O
ATOM	9364	ND2	ASN	D	33	18.006	11.567	-31.848	1.00	22.98	7	D	N
ATOM	9365	N	GLU	D	34	15.714	8.444	-35.227	1.00	23.99	7	D	N
ATOM	9366	CA	GLU	D	34	15.027	7.995	-36.433	1.00	27.39	6	D	C
ATOM	9367	C	GLU	D	34	13.604	8.548	-36.508	1.00	27.68	6	D	C
ATOM	9368	O	GLU	D	34	13.122	8.984	-37.550	1.00	25.76	8	D	O
ATOM	9369	CB	GLU	D	34	15.000	6.464	-36.472	1.00	31.29	6	D	C
ATOM	9370	CG	GLU	D	34	14.363	5.976	-37.771	1.00	37.15	6	D	C
ATOM	9371	CD	GLU	D	34	14.411	4.486	-38.020	1.00	39.76	6	D	C
ATOM	9372	OE1	GLU	D	34	15.066	3.708	-37.299	1.00	41.93	8	D	O
ATOM	9373	OE2	GLU	D	34	13.727	4.026	-38.959	1.00	41.32	8	D	O
ATOM	9374	N	ASP	D	35	12.879	8.472	-35.386	1.00	24.21	7	D	N
ATOM	9375	CA	ASP	D	35	11.523	9.032	-35.349	1.00	23.91	6	D	C
ATOM	9376	C	ASP	D	35	11.604	10.543	-35.361	1.00	22.80	6	D	C
ATOM	9377	O	ASP	D	35	10.705	11.132	-35.979	1.00	23.12	8	D	O
ATOM	9378	CB	ASP	D	35	10.731	8.494	-34.143	1.00	21.98	6	D	C
ATOM	9379	CG	ASP	D	35	10.252	7.063	-34.437	1.00	25.72	6	D	C
ATOM	9380	OD1	ASP	D	35	10.539	6.605	-35.564	1.00	24.88	8	D	O
ATOM	9381	OD2	ASP	D	35	9.575	6.379	-33.622	1.00	25.46	8	D	O
ATOM	9382	N	LEU	D	36	12.587	11.155	-34.651	1.00	21.95	7	D	N
ATOM	9383	CA	LEU	D	36	12.594	12.614	-34.686	1.00	22.19	6	D	C
ATOM	9384	C	LEU	D	36	12.727	13.057	-36.151	1.00	23.40	6	D	C
ATOM	9385	O	LEU	D	36	12.065	14.010	-36.531	1.00	20.55	8	D	O
ATOM	9386	CB	LEU	D	36	13.644	13.329	-33.827	1.00	20.15	6	D	C
ATOM	9387	CG	LEU	D	36	13.589	12.969	-32.316	1.00	21.26	6	D	C
ATOM	9388	CD1	LEU	D	36	14.783	13.554	-31.573	1.00	20.78	6	D	C
ATOM	9389	CD2	LEU	D	36	12.262	13.395	-31.689	1.00	20.40	6	D	C
ATOM	9390	N	ARG	D	37	13.592	12.381	-36.895	1.00	22.73	7	D	N
ATOM	9391	CA	ARG	D	37	13.787	12.775	-38.293	1.00	27.19	6	D	C
ATOM	9392	C	ARG	D	37	12.494	12.591	-39.085	1.00	26.29	6	D	C
ATOM	9393	O	ARG	D	37	12.117	13.491	-39.829	1.00	24.81	8	D	O
ATOM	9394	CB	ARG	D	37	14.920	11.979	-38.958	1.00	29.42	6	D	C

120/188

ATOM	9395	CG	ARG	D	37	16.253	12.129	-38.243	1.00	36.64	6	D	C
ATOM	9396	CD	ARG	D	37	17.460	11.594	-39.017	1.00	40.58	6	D	C
ATOM	9397	NE	ARG	D	37	17.342	10.159	-39.234	1.00	45.31	7	D	N
ATOM	9398	CZ	ARG	D	37	17.753	9.148	-38.482	1.00	45.79	6	D	C
ATOM	9399	NH1	ARG	D	37	17.485	7.889	-38.863	1.00	46.31	7	D	N
ATOM	9400	NH2	ARG	D	37	18.447	9.366	-37.382	1.00	45.77	7	D	N
ATOM	9401	N	ARG	D	38	11.823	11.458	-38.925	1.00	26.51	7	D	N
ATOM	9402	CA	ARG	D	38	10.548	11.265	-39.633	1.00	26.90	6	D	C
ATOM	9403	C	ARG	D	38	9.570	12.386	-39.295	1.00	24.64	6	D	C
ATOM	9404	O	ARG	D	38	8.822	12.811	-40.187	1.00	24.45	8	D	O
ATOM	9405	CB	ARG	D	38	9.895	9.915	-39.327	1.00	28.70	6	D	C
ATOM	9406	CG	ARG	D	38	10.727	8.729	-39.851	1.00	29.10	6	D	C
ATOM	9407	CD	ARG	D	38	10.201	7.435	-39.243	1.00	31.45	6	D	C
ATOM	9408	NE	ARG	D	38	8.820	7.193	-39.592	1.00	32.66	7	D	N
ATOM	9409	CZ	ARG	D	38	7.920	6.427	-38.990	1.00	32.18	6	D	C
ATOM	9410	NH1	ARG	D	38	6.700	6.401	-39.495	1.00	32.62	7	D	N
ATOM	9411	NH2	ARG	D	38	8.187	5.750	-37.883	1.00	31.66	7	D	N
ATOM	9412	N	ARG	D	39	9.576	12.898	-38.061	1.00	22.30	7	D	N
ATOM	9413	CA	ARG	D	39	8.595	13.932	-37.702	1.00	22.38	6	D	C
ATOM	9414	C	ARG	D	39	8.848	15.280	-38.375	1.00	24.22	6	D	C
ATOM	9415	O	ARG	D	39	7.987	16.151	-38.506	1.00	23.60	8	D	O
ATOM	9416	CB	ARG	D	39	8.619	14.139	-36.159	1.00	22.00	6	D	C
ATOM	9417	CG	ARG	D	39	7.403	14.991	-35.691	1.00	19.22	6	D	C
ATOM	9418	CD	ARG	D	39	7.703	15.543	-34.263	1.00	18.58	6	D	C
ATOM	9419	NE	ARG	D	39	8.668	16.600	-34.470	1.00	17.65	7	D	N
ATOM	9420	CZ	ARG	D	39	8.445	17.845	-34.800	1.00	19.60	6	D	C
ATOM	9421	NH1	ARG	D	39	7.197	18.311	-34.913	1.00	21.06	7	D	N
ATOM	9422	NH2	ARG	D	39	9.448	18.647	-35.028	1.00	19.06	7	D	N
ATOM	9423	N	GLN	D	40	10.101	15.572	-38.752	1.00	25.34	7	D	N
ATOM	9424	CA	GLN	D	40	10.428	16.862	-39.341	1.00	28.00	6	D	C
ATOM	9425	C	GLN	D	40	10.012	16.943	-40.806	1.00	27.92	6	D	C
ATOM	9426	O	GLN	D	40	10.089	18.021	-41.370	1.00	32.07	8	D	O
ATOM	9427	CB	GLN	D	40	11.949	17.167	-39.277	1.00	28.30	6	D	C
ATOM	9428	CG	GLN	D	40	12.360	17.548	-37.859	1.00	28.43	6	D	C
ATOM	9429	CD	GLN	D	40	13.774	18.104	-37.820	1.00	29.25	6	D	C
ATOM	9430	OE1	GLN	D	40	14.689	17.393	-37.395	1.00	27.64	8	D	O
ATOM	9431	NE2	GLN	D	40	13.893	19.341	-38.288	1.00	27.56	7	D	N
ATOM	9432	N	GLY	D	41	9.786	15.816	-41.437	1.00	28.35	7	D	N
ATOM	9433	CA	GLY	D	41	9.615	15.722	-42.860	1.00	29.87	6	D	C
ATOM	9434	C	GLY	D	41	8.171	15.700	-43.326	1.00	27.49	6	D	C
ATOM	9435	O	GLY	D	41	7.238	16.004	-42.583	1.00	28.82	8	D	O
ATOM	9436	N	GLY	D	42	8.021	15.250	-44.558	1.00	28.21	7	D	N
ATOM	9437	CA	GLY	D	42	6.710	15.236	-45.233	1.00	27.58	6	D	C
ATOM	9438	C	GLY	D	42	6.681	16.464	-46.166	1.00	28.63	6	D	C
ATOM	9439	O	GLY	D	42	6.980	17.599	-45.814	1.00	25.44	8	D	O
ATOM	9440	N	TYR	D	43	6.259	16.180	-47.407	1.00	28.38	7	D	N
ATOM	9441	CA	TYR	D	43	6.168	17.210	-48.437	1.00	28.05	6	D	C
ATOM	9442	C	TYR	D	43	5.227	18.318	-48.009	1.00	28.18	6	D	C
ATOM	9443	O	TYR	D	43	4.088	18.040	-47.655	1.00	28.20	8	D	O
ATOM	9444	CB	TYR	D	43	5.680	16.528	-49.744	1.00	26.84	6	D	C
ATOM	9445	CG	TYR	D	43	5.780	17.558	-50.850	1.00	26.93	6	D	C
ATOM	9446	CD1	TYR	D	43	7.025	17.826	-51.410	1.00	27.74	6	D	C
ATOM	9447	CD2	TYR	D	43	4.690	18.276	-51.296	1.00	25.18	6	D	C
ATOM	9448	CE1	TYR	D	43	7.186	18.774	-52.395	1.00	27.37	6	D	C
ATOM	9449	CE2	TYR	D	43	4.821	19.206	-52.308	1.00	28.05	6	D	C
ATOM	9450	CZ	TYR	D	43	6.078	19.455	-52.845	1.00	28.69	6	D	C
ATOM	9451	OH	TYR	D	43	6.214	20.387	-53.865	1.00	29.05	8	D	O
ATOM	9452	N	GLY	D	44	5.644	19.580	-48.034	1.00	29.16	7	D	N
ATOM	9453	CA	GLY	D	44	4.773	20.658	-47.599	1.00	29.01	6	D	C
ATOM	9454	C	GLY	D	44	5.374	21.366	-46.394	1.00	30.65	6	D	C
ATOM	9455	O	GLY	D	44	4.881	22.432	-46.077	1.00	31.10	8	D	O
ATOM	9456	N	ARG	D	45	6.272	20.736	-45.627	1.00	29.69	7	D	N
ATOM	9457	CA	ARG	D	45	6.853	21.438	-44.498	1.00	30.48	6	D	C
ATOM	9458	C	ARG	D	45	8.094	22.172	-44.994	1.00	32.72	6	D	C
ATOM	9459	O	ARG	D	45	8.806	21.632	-45.851	1.00	33.10	8	D	O
ATOM	9460	CB	ARG	D	45	7.242	20.507	-43.341	1.00	29.33	6	D	C
ATOM	9461	CG	ARG	D	45	6.027	19.747	-42.796	1.00	28.72	6	D	C
ATOM	9462	CD	ARG	D	45	6.284	19.212	-41.373	1.00	28.42	6	D	C
ATOM	9463	NE	ARG	D	45	6.083	20.364	-40.462	1.00	26.75	7	D	N
ATOM	9464	CZ	ARG	D	45	6.405	20.350	-39.161	1.00	25.08	6	D	C
ATOM	9465	NH1	ARG	D	45	6.961	19.273	-38.625	1.00	21.88	7	D	N
ATOM	9466	NH2	ARG	D	45	6.180	21.454	-38.473	1.00	25.16	7	D	N
ATOM	9467	N	GLY	D	46	8.321	23.367	-44.461	1.00	34.16	7	D	N
ATOM	9468	CA	GLY	D	46	9.533	24.055	-44.942	1.00	37.04	6	D	C
ATOM	9469	C	GLY	D	46	10.226	24.728	-43.778	1.00	38.78	6	D	C
ATOM	9470	O	GLY	D	46	10.468	24.149	-42.721	1.00	39.26	8	D	O
ATOM	9471	N	GLY	D	47	10.570	25.992	-43.980	1.00	39.63	7	D	N
ATOM	9472	CA	GLY	D	47	11.126	26.883	-43.003	1.00	36.95	6	D	C
ATOM	9473	C	GLY	D	47	11.866	26.341	-41.813	1.00	36.70	6	D	C

121/188

ATOM	9474	O	GLY	D	47	13.037	25.960	-41.850	1.00	35.06	8	D	O
ATOM	9475	N	ARG	D	48	11.201	26.407	-40.649	1.00	36.03	7	D	N
ATOM	9476	CA	ARG	D	48	11.879	25.958	-39.424	1.00	35.05	6	D	C
ATOM	9477	C	ARG	D	48	12.491	24.576	-39.633	1.00	33.24	6	D	C
ATOM	9478	O	ARG	D	48	13.571	24.310	-39.086	1.00	31.16	8	D	O
ATOM	9479	CB	ARG	D	48	10.897	26.028	-38.247	1.00	37.26	6	D	C
ATOM	9480	CG	ARG	D	48	11.410	25.231	-37.065	1.00	40.30	6	D	C
ATOM	9481	CD	ARG	D	48	12.390	26.012	-36.182	1.00	41.03	6	D	C
ATOM	9482	NE	ARG	D	48	11.539	26.492	-35.138	1.00	43.20	7	D	N
ATOM	9483	CZ	ARG	D	48	11.508	26.547	-33.834	1.00	40.72	6	D	C
ATOM	9484	NH1	ARG	D	48	12.457	26.091	-33.049	1.00	39.34	7	D	N
ATOM	9485	NH2	ARG	D	48	10.389	27.126	-33.434	1.00	41.28	7	D	N
ATOM	9486	N	MET	D	49	11.821	23.688	-40.379	1.00	27.99	7	D	N
ATOM	9487	CA	MET	D	49	12.289	22.331	-40.525	1.00	29.21	6	D	C
ATOM	9488	C	MET	D	49	13.631	22.267	-41.259	1.00	30.34	6	D	C
ATOM	9489	O	MET	D	49	14.288	21.227	-41.219	1.00	30.57	8	D	O
ATOM	9490	CB	MET	D	49	11.282	21.425	-41.268	1.00	27.45	6	D	C
ATOM	9491	CG	MET	D	49	9.875	21.610	-40.704	1.00	27.80	6	D	C
ATOM	9492	SE	MET	D	49	10.346	20.656	-38.684	1.00	51.65	34	D	SE
ATOM	9493	CE2	MET	D	49	10.418	22.184	-37.571	1.00	31.03	6	D	C
ATOM	9494	N	GLY	D	50	14.049	23.338	-41.907	1.00	28.86	7	D	N
ATOM	9495	CA	GLY	D	50	15.345	23.256	-42.599	1.00	34.67	6	D	C
ATOM	9496	C	GLY	D	50	16.416	23.951	-41.775	1.00	35.72	6	D	C
ATOM	9497	O	GLY	D	50	17.566	24.008	-42.179	1.00	37.48	8	D	O
ATOM	9498	N	ILE	D	51	15.958	24.457	-40.637	1.00	36.18	7	D	N
ATOM	9499	CA	ILE	D	51	16.802	25.115	-39.654	1.00	36.60	6	D	C
ATOM	9500	C	ILE	D	51	17.118	24.115	-38.533	1.00	36.02	6	D	C
ATOM	9501	O	ILE	D	51	18.251	24.158	-38.060	1.00	35.90	8	D	O
ATOM	9502	CB	ILE	D	51	16.117	26.323	-39.021	1.00	37.30	6	D	C
ATOM	9503	CG1	ILE	D	51	15.956	27.485	-40.012	1.00	38.99	6	D	C
ATOM	9504	CG2	ILE	D	51	16.855	26.807	-37.776	1.00	39.13	6	D	C
ATOM	9505	CD1	ILE	D	51	15.109	28.616	-39.452	1.00	38.10	6	D	C
ATOM	9506	N	GLU	D	52	16.145	23.313	-38.106	1.00	32.95	7	D	N
ATOM	9507	CA	GLU	D	52	16.398	22.363	-37.029	1.00	32.34	6	D	C
ATOM	9508	C	GLU	D	52	16.920	21.035	-37.569	1.00	33.29	6	D	C
ATOM	9509	O	GLU	D	52	16.677	20.635	-38.719	1.00	31.42	8	D	O
ATOM	9510	CB	GLU	D	52	15.144	22.122	-36.167	1.00	31.36	6	D	C
ATOM	9511	CG	GLU	D	52	14.547	23.372	-35.507	1.00	28.31	6	D	C
ATOM	9512	CD	GLU	D	52	15.409	24.002	-34.449	1.00	29.56	6	D	C
ATOM	9513	OE1	GLU	D	52	15.221	25.168	-34.012	1.00	31.07	8	D	O
ATOM	9514	OE2	GLU	D	52	16.381	23.368	-33.978	1.00	27.87	8	D	O
ATOM	9515	N	ASN	D	53	17.654	20.311	-36.741	1.00	31.72	7	D	N
ATOM	9516	CA	ASN	D	53	18.118	18.961	-37.087	1.00	33.19	6	D	C
ATOM	9517	C	ASN	D	53	17.963	18.240	-35.738	1.00	30.44	6	D	C
ATOM	9518	O	ASN	D	53	18.871	18.319	-34.908	1.00	27.15	8	D	O
ATOM	9519	CB	ASN	D	53	19.537	19.004	-37.620	1.00	38.18	6	D	C
ATOM	9520	CG	ASN	D	53	20.156	17.662	-37.934	1.00	41.55	6	D	C
ATOM	9521	OD1	ASN	D	53	21.276	17.599	-38.493	1.00	43.80	8	D	O
ATOM	9522	ND2	ASN	D	53	19.442	16.608	-37.569	1.00	40.80	7	D	N
ATOM	9523	N	ASP	D	54	16.723	17.776	-35.511	1.00	25.95	7	D	N
ATOM	9524	CA	ASP	D	54	16.388	17.354	-34.144	1.00	24.40	6	D	C
ATOM	9525	C	ASP	D	54	17.118	16.072	-33.760	1.00	22.70	6	D	C
ATOM	9526	O	ASP	D	54	16.825	15.056	-34.395	1.00	21.78	8	D	O
ATOM	9527	CB	ASP	D	54	14.875	17.125	-33.987	1.00	22.28	6	D	C
ATOM	9528	CG	ASP	D	54	14.071	18.410	-34.089	1.00	22.98	6	D	C
ATOM	9529	OD1	ASP	D	54	14.689	19.447	-33.831	1.00	18.39	8	D	O
ATOM	9530	OD2	ASP	D	54	12.841	18.346	-34.393	1.00	23.58	8	D	O
ATOM	9531	N	GLN	D	55	17.948	16.127	-32.749	1.00	23.08	7	D	N
ATOM	9532	CA	GLN	D	55	18.526	14.886	-32.219	1.00	25.75	6	D	C
ATOM	9533	C	GLN	D	55	18.387	14.855	-30.691	1.00	24.21	6	D	C
ATOM	9534	O	GLN	D	55	18.552	15.925	-30.105	1.00	21.52	8	D	O
ATOM	9535	CB	GLN	D	55	20.048	14.931	-32.519	1.00	30.39	6	D	C
ATOM	9536	CG	GLN	D	55	20.236	15.007	-34.036	1.00	33.83	6	D	C
ATOM	9537	CD	GLN	D	55	21.712	15.093	-34.398	1.00	37.67	6	D	C
ATOM	9538	OE1	GLN	D	55	22.035	14.540	-35.461	1.00	40.28	8	D	O
ATOM	9539	NE2	GLN	D	55	22.525	15.749	-33.593	1.00	38.44	7	D	N
ATOM	9540	N	VAL	D	56	18.341	13.699	-30.059	1.00	22.67	7	D	N
ATOM	9541	CA	VAL	D	56	18.188	13.653	-28.603	1.00	22.88	6	D	C
ATOM	9542	C	VAL	D	56	19.486	13.628	-27.802	1.00	23.26	6	D	C
ATOM	9543	O	VAL	D	56	20.579	13.258	-28.258	1.00	22.91	8	D	O
ATOM	9544	CB	VAL	D	56	17.343	12.403	-28.224	1.00	22.08	6	D	C
ATOM	9545	CG1	VAL	D	56	18.120	11.110	-28.349	1.00	19.11	6	D	C
ATOM	9546	CG2	VAL	D	56	16.698	12.547	-26.855	1.00	23.41	6	D	C
ATOM	9547	N	VAL	D	57	19.393	14.128	-26.567	1.00	24.16	7	D	N
ATOM	9548	CA	VAL	D	57	20.495	14.097	-25.621	1.00	22.05	6	D	C
ATOM	9549	C	VAL	D	57	19.909	13.489	-24.325	1.00	21.60	6	D	C
ATOM	9550	O	VAL	D	57	19.011	14.091	-23.739	1.00	18.82	8	D	O
ATOM	9551	CB	VAL	D	57	21.143	15.426	-25.264	1.00	25.19	6	D	C
ATOM	9552	CG1	VAL	D	57	22.319	15.140	-24.314	1.00	24.41	6	D	C

122/188

ATOM	9553	CG2	VAL	D	57	21.722	16.123	-26.508	1.00	25.86	6	D	C
ATOM	9554	N	PHE	D	58	20.385	12.300	-23.999	1.00	19.38	7	D	N
ATOM	9555	CA	PHE	D	58	19.906	11.705	-22.747	1.00	19.75	6	D	C
ATOM	9556	C	PHE	D	58	20.743	12.259	-21.589	1.00	20.18	6	D	C
ATOM	9557	O	PHE	D	58	21.970	12.286	-21.698	1.00	16.96	8	D	O
ATOM	9558	CB	PHE	D	58	20.108	10.212	-22.689	1.00	20.46	6	D	C
ATOM	9559	CG	PHE	D	58	19.249	9.373	-23.586	1.00	22.90	6	D	C
ATOM	9560	CD1	PHE	D	58	17.883	9.290	-23.351	1.00	21.08	6	D	C
ATOM	9561	CD2	PHE	D	58	19.818	8.609	-24.596	1.00	23.67	6	D	C
ATOM	9562	CE1	PHE	D	58	17.067	8.502	-24.148	1.00	23.56	6	D	C
ATOM	9563	CE2	PHE	D	58	18.998	7.807	-25.391	1.00	25.30	6	D	C
ATOM	9564	CZ	PHE	D	58	17.627	7.758	-25.162	1.00	23.24	6	D	C
ATOM	9565	N	THR	D	59	20.070	12.558	-20.480	1.00	17.60	7	D	N
ATOM	9566	CA	THR	D	59	20.818	13.061	-19.283	1.00	19.80	6	D	C
ATOM	9567	C	THR	D	59	20.453	12.284	-18.025	1.00	19.95	6	D	C
ATOM	9568	O	THR	D	59	21.015	12.527	-16.951	1.00	17.98	8	D	O
ATOM	9569	CB	THR	D	59	20.389	14.504	-19.476	1.00	23.11	6	D	C
ATOM	9570	OG1	THR	D	59	21.459	15.390	-19.825	1.00	29.19	8	D	O
ATOM	9571	CG2	THR	D	59	19.331	15.053	-18.620	1.00	17.53	6	D	C
ATOM	9572	N	SER	D	60	19.583	11.270	-18.099	1.00	18.07	7	D	N
ATOM	9573	CA	SER	D	60	19.291	10.423	-16.957	1.00	19.30	6	D	C
ATOM	9574	C	SER	D	60	18.582	9.156	-17.411	1.00	18.40	6	D	C
ATOM	9575	O	SER	D	60	17.982	9.145	-18.498	1.00	17.75	8	D	O
ATOM	9576	CB	SER	D	60	18.466	11.102	-15.840	1.00	18.32	6	D	C
ATOM	9577	OG	SER	D	60	17.102	11.240	-16.307	1.00	15.60	8	D	O
ATOM	9578	N	GLY	D	61	18.646	8.138	-16.561	1.00	19.58	7	D	N
ATOM	9579	CA	GLY	D	61	17.888	6.900	-16.718	1.00	18.05	6	D	C
ATOM	9580	C	GLY	D	61	18.401	5.884	-17.713	1.00	19.86	6	D	C
ATOM	9581	O	GLY	D	61	17.822	4.777	-17.923	1.00	17.72	8	D	O
ATOM	9582	N	VAL	D	62	19.517	6.232	-18.371	1.00	20.52	7	D	N
ATOM	9583	CA	VAL	D	62	20.079	5.313	-19.367	1.00	20.87	6	D	C
ATOM	9584	C	VAL	D	62	21.579	5.175	-19.050	1.00	21.69	6	D	C
ATOM	9585	O	VAL	D	62	22.305	6.151	-18.936	1.00	21.92	8	D	O
ATOM	9586	CB	VAL	D	62	19.880	5.834	-20.794	1.00	21.99	6	D	C
ATOM	9587	CG1	VAL	D	62	20.452	4.882	-21.870	1.00	21.98	6	D	C
ATOM	9588	CG2	VAL	D	62	18.381	6.047	-21.029	1.00	22.35	6	D	C
ATOM	9589	N	ARG	D	63	22.029	3.928	-18.976	1.00	21.07	7	D	N
ATOM	9590	CA	ARG	D	63	23.396	3.610	-18.617	1.00	21.08	6	D	C
ATOM	9591	C	ARG	D	63	23.915	2.499	-19.519	1.00	20.89	6	D	C
ATOM	9592	O	ARG	D	63	23.287	1.444	-19.624	1.00	16.71	8	D	O
ATOM	9593	CB	ARG	D	63	23.501	3.104	-17.163	1.00	21.29	6	D	C
ATOM	9594	CG	ARG	D	63	24.924	3.257	-16.644	1.00	19.84	6	D	C
ATOM	9595	CD	ARG	D	63	25.119	2.954	-15.155	1.00	20.61	6	D	C
ATOM	9596	NE	ARG	D	63	26.589	2.800	-14.971	1.00	22.87	7	D	N
ATOM	9597	CZ	ARG	D	63	27.169	1.959	-14.142	1.00	22.75	6	D	C
ATOM	9598	NH1	ARG	D	63	26.428	1.200	-13.330	1.00	21.74	7	D	N
ATOM	9599	NH2	ARG	D	63	28.503	1.911	-14.068	1.00	23.63	7	D	N
ATOM	9600	N	HIS	D	64	25.032	2.785	-20.196	1.00	22.22	7	D	N
ATOM	9601	CA	HIS	D	64	25.620	1.764	-21.069	1.00	20.59	6	D	C
ATOM	9602	C	HIS	D	64	24.641	1.072	-21.993	1.00	23.68	6	D	C
ATOM	9603	O	HIS	D	64	24.633	-0.155	-22.005	1.00	22.92	8	D	O
ATOM	9604	CB	HIS	D	64	26.283	0.709	-20.142	1.00	22.61	6	D	C
ATOM	9605	CG	HIS	D	64	27.411	1.260	-19.333	1.00	22.79	6	D	C
ATOM	9606	ND1	HIS	D	64	27.828	0.743	-18.142	1.00	24.94	7	D	N
ATOM	9607	CD2	HIS	D	64	28.217	2.327	-19.563	1.00	22.72	6	D	C
ATOM	9608	CE1	HIS	D	64	28.797	1.475	-17.630	1.00	22.74	6	D	C
ATOM	9609	NE2	HIS	D	64	29.049	2.431	-18.486	1.00	24.05	7	D	N
ATOM	9610	N	GLY	D	65	23.780	1.805	-22.722	1.00	24.41	7	D	N
ATOM	9611	CA	GLY	D	65	22.844	1.250	-23.645	1.00	23.83	6	D	C
ATOM	9612	C	GLY	D	65	21.535	0.702	-23.153	1.00	24.95	6	D	C
ATOM	9613	O	GLY	D	65	20.762	0.137	-23.970	1.00	24.03	8	D	O
ATOM	9614	N	LYS	D	66	21.316	0.706	-21.835	1.00	24.34	7	D	N
ATOM	9615	CA	LYS	D	66	20.087	0.168	-21.270	1.00	23.63	6	D	C
ATOM	9616	C	LYS	D	66	19.498	1.105	-20.209	1.00	22.58	6	D	C
ATOM	9617	O	LYS	D	66	20.241	1.816	-19.522	1.00	22.83	8	D	O
ATOM	9618	CB	LYS	D	66	20.343	-1.168	-20.575	1.00	25.11	6	D	C
ATOM	9619	CG	LYS	D	66	20.735	-2.235	-21.613	1.00	27.85	6	D	C
ATOM	9620	CD	LYS	D	66	20.717	-3.619	-20.974	1.00	28.62	6	D	C
ATOM	9621	CE	LYS	D	66	21.319	-4.659	-21.921	1.00	29.70	6	D	C
ATOM	9622	NZ	LYS	D	66	21.235	-6.017	-21.292	1.00	29.05	7	D	N
ATOM	9623	N	THR	D	67	18.171	1.094	-20.085	1.00	20.75	7	D	N
ATOM	9624	CA	THR	D	67	17.519	1.904	-19.063	1.00	19.55	6	D	C
ATOM	9625	C	THR	D	67	17.878	1.263	-17.727	1.00	21.43	6	D	C
ATOM	9626	O	THR	D	67	18.067	0.031	-17.689	1.00	22.06	8	D	O
ATOM	9627	CB	THR	D	67	15.984	1.860	-19.217	1.00	19.95	6	D	C
ATOM	9628	OG1	THR	D	67	15.591	0.470	-19.207	1.00	18.20	8	D	O
ATOM	9629	CG2	THR	D	67	15.562	2.481	-20.539	1.00	19.07	6	D	C
ATOM	9630	N	THR	D	68	17.699	1.968	-16.616	1.00	20.88	7	D	N
ATOM	9631	CA	THR	D	68	17.953	1.393	-15.301	1.00	19.19	6	D	C

123/188

ATOM	9632	C	THR	D	68	16.683	1.375	-14.443	1.00	20.33	6	D	C
ATOM	9633	O	THR	D	68	16.864	1.101	-13.253	1.00	20.98	8	D	O
ATOM	9634	CB	THR	D	68	18.965	2.323	-14.589	1.00	21.81	6	D	C
ATOM	9635	CG1	THR	D	68	18.317	3.629	-14.505	1.00	21.21	8	D	O
ATOM	9636	CG2	THR	D	68	20.280	2.468	-15.367	1.00	18.14	6	D	C
ATOM	9637	N	GLY	D	69	15.550	1.863	-14.947	1.00	18.01	7	D	N
ATOM	9638	CA	GLY	D	69	14.322	1.951	-14.179	1.00	17.68	6	D	C
ATOM	9639	C	GLY	D	69	14.201	3.365	-13.548	1.00	18.61	6	D	C
ATOM	9640	O	GLY	D	69	13.123	3.728	-13.099	1.00	17.62	8	D	O
ATOM	9641	N	ALA	D	70	15.234	4.172	-13.580	1.00	16.54	7	D	N
ATOM	9642	CA	ALA	D	70	15.154	5.559	-13.043	1.00	17.16	6	D	C
ATOM	9643	C	ALA	D	70	14.498	6.482	-14.069	1.00	17.97	6	D	C
ATOM	9644	O	ALA	D	70	14.282	6.061	-15.208	1.00	16.13	8	D	O
ATOM	9645	CB	ALA	D	70	16.622	5.945	-12.803	1.00	15.80	6	D	C
ATOM	9646	N	PRO	D	71	14.038	7.678	-13.721	1.00	16.04	7	D	N
ATOM	9647	CA	PRO	D	71	13.496	8.593	-14.674	1.00	18.20	6	D	C
ATOM	9648	C	PRO	D	71	14.493	8.850	-15.817	1.00	18.54	6	D	C
ATOM	9649	O	PRO	D	71	15.677	9.045	-15.593	1.00	18.52	8	D	O
ATOM	9650	CB	PRO	D	71	13.219	9.872	-13.898	1.00	16.42	6	D	C
ATOM	9651	CG	PRO	D	71	13.011	9.353	-12.484	1.00	16.95	6	D	C
ATOM	9652	CD	PRO	D	71	14.087	8.274	-12.345	1.00	16.65	6	D	C
ATOM	9653	N	ILE	D	72	13.920	8.918	-17.011	1.00	18.99	7	D	N
ATOM	9654	CA	ILE	D	72	14.733	9.132	-18.221	1.00	17.56	6	D	C
ATOM	9655	C	ILE	D	72	14.501	10.566	-18.681	1.00	18.09	6	D	C
ATOM	9656	O	ILE	D	72	13.338	10.945	-18.840	1.00	16.17	8	D	O
ATOM	9657	CB	ILE	D	72	14.342	8.161	-19.327	1.00	17.90	6	D	C
ATOM	9658	CG1	ILE	D	72	14.571	6.704	-18.911	1.00	17.49	6	D	C
ATOM	9659	CG2	ILE	D	72	15.045	8.476	-20.657	1.00	19.22	6	D	C
ATOM	9660	CD1	ILE	D	72	13.815	5.748	-19.827	1.00	21.23	6	D	C
ATOM	9661	N	THR	D	73	15.586	11.297	-18.935	1.00	15.35	7	D	N
ATOM	9662	CA	THR	D	73	15.398	12.693	-19.376	1.00	14.62	6	D	C
ATOM	9663	C	THR	D	73	16.029	12.774	-20.781	1.00	18.64	6	D	C
ATOM	9664	O	THR	D	73	17.118	12.272	-20.982	1.00	15.71	8	D	O
ATOM	9665	CB	THR	D	73	16.118	13.623	-18.420	1.00	15.54	6	D	C
ATOM	9666	OG1	THR	D	73	15.716	13.420	-17.055	1.00	15.15	8	D	O
ATOM	9667	CG2	THR	D	73	15.884	15.121	-18.745	1.00	16.88	6	D	C
ATOM	9668	N	MET	D	74	15.339	13.384	-21.724	1.00	19.60	7	D	N
ATOM	9669	CA	MET	D	74	15.740	13.566	-23.101	1.00	18.66	6	D	C
ATOM	9670	C	MET	D	74	15.591	15.057	-23.426	1.00	19.23	6	D	C
ATOM	9671	O	MET	D	74	14.621	15.701	-23.003	1.00	20.76	8	D	O
ATOM	9672	CB	MET	D	74	14.835	12.698	-23.999	1.00	16.09	6	D	C
ATOM	9673	CG	MET	D	74	15.101	11.235	-23.534	1.00	15.89	6	D	C
ATOM	9674	SE	MET	D	74	13.875	10.419	-24.987	1.00	38.31	34	D	SE
ATOM	9675	CE2	MET	D	74	12.059	10.831	-24.278	1.00	15.81	6	D	C
ATOM	9676	N	ASP	D	75	16.614	15.600	-24.063	1.00	17.68	7	D	N
ATOM	9677	CA	ASP	D	75	16.605	16.995	-24.482	1.00	20.23	6	D	C
ATOM	9678	C	ASP	D	75	16.632	17.034	-26.019	1.00	19.94	6	D	C
ATOM	9679	O	ASP	D	75	17.329	16.208	-26.609	1.00	20.43	8	D	O
ATOM	9680	CB	ASP	D	75	17.869	17.744	-24.056	1.00	22.95	6	D	C
ATOM	9681	CG	ASP	D	75	18.153	17.941	-22.599	1.00	24.46	6	D	C
ATOM	9682	OD1	ASP	D	75	17.299	17.672	-21.738	1.00	24.26	8	D	O
ATOM	9683	OD2	ASP	D	75	19.264	18.425	-22.272	1.00	24.22	8	D	O
ATOM	9684	N	VAL	D	76	16.137	18.104	-26.603	1.00	21.20	7	D	N
ATOM	9685	CA	VAL	D	76	16.305	18.408	-28.014	1.00	20.12	6	D	C
ATOM	9686	C	VAL	D	76	16.502	19.934	-28.066	1.00	20.81	6	D	C
ATOM	9687	O	VAL	D	76	15.609	20.711	-27.714	1.00	18.31	8	D	O
ATOM	9688	CB	VAL	D	76	15.146	18.062	-28.965	1.00	19.99	6	D	C
ATOM	9689	CG1	VAL	D	76	15.470	18.574	-30.406	1.00	19.68	6	D	C
ATOM	9690	CG2	VAL	D	76	14.851	16.575	-28.952	1.00	19.77	6	D	C
ATOM	9691	N	ILE	D	77	17.662	20.327	-28.533	1.00	21.46	7	D	N
ATOM	9692	CA	ILE	D	77	17.960	21.751	-28.644	1.00	22.59	6	D	C
ATOM	9693	C	ILE	D	77	17.142	22.453	-29.703	1.00	21.53	6	D	C
ATOM	9694	O	ILE	D	77	16.884	21.913	-30.780	1.00	19.95	8	D	O
ATOM	9695	CB	ILE	D	77	19.473	21.933	-28.896	1.00	25.52	6	D	C
ATOM	9696	CG1	ILE	D	77	20.260	21.223	-27.796	1.00	28.52	6	D	C
ATOM	9697	CG2	ILE	D	77	19.893	23.386	-28.939	1.00	26.93	6	D	C
ATOM	9698	CD1	ILE	D	77	19.911	21.740	-26.398	1.00	33.01	6	D	C
ATOM	9699	N	ASN	D	78	16.850	23.739	-29.504	1.00	22.24	7	D	N
ATOM	9700	CA	ASN	D	78	16.264	24.568	-30.578	1.00	24.64	6	D	C
ATOM	9701	C	ASN	D	78	17.397	25.460	-31.154	1.00	26.74	6	D	C
ATOM	9702	O	ASN	D	78	17.840	26.474	-30.575	1.00	25.30	8	D	O
ATOM	9703	CB	ASN	D	78	15.161	25.454	-30.059	1.00	23.94	6	D	C
ATOM	9704	CG	ASN	D	78	13.858	24.778	-29.690	1.00	22.45	6	D	C
ATOM	9705	OD1	ASN	D	78	13.466	23.789	-30.313	1.00	22.34	8	D	O
ATOM	9706	ND2	ASN	D	78	13.168	25.301	-28.675	1.00	20.56	7	D	N
ATOM	9707	N	LYS	D	79	17.924	25.047	-32.302	1.00	29.38	7	D	N
ATOM	9708	CA	LYS	D	79	18.948	25.846	-32.958	1.00	32.55	6	D	C
ATOM	9709	C	LYS	D	79	18.410	27.252	-33.202	1.00	33.44	6	D	C
ATOM	9710	O	LYS	D	79	19.115	28.237	-32.983	1.00	36.34	8	D	O

124/188

ATOM	9711	CB	LYS	D	79	19.309	25.235	-34.308	1.00	36.57	6	D	C
ATOM	9712	CG	LYS	D	79	19.717	23.767	-34.170	1.00	38.39	6	D	C
ATOM	9713	CD	LYS	D	79	20.407	23.311	-35.455	1.00	42.07	6	D	C
ATOM	9714	CE	LYS	D	79	21.361	22.164	-35.126	1.00	42.63	6	D	C
ATOM	9715	NZ	LYS	D	79	22.651	22.352	-35.843	1.00	46.58	7	D	N
ATOM	9716	N	ASP	D	80	17.160	27.412	-33.575	1.00	33.42	7	D	N
ATOM	9717	CA	ASP	D	80	16.644	28.748	-33.866	1.00	35.33	6	D	C
ATOM	9718	C	ASP	D	80	16.731	29.727	-32.704	1.00	34.72	6	D	C
ATOM	9719	O	ASP	D	80	16.564	30.934	-32.904	1.00	33.46	8	D	O
ATOM	9720	CB	ASP	D	80	15.218	28.596	-34.421	1.00	36.24	6	D	C
ATOM	9721	CG	ASP	D	80	14.734	29.818	-35.179	1.00	37.96	6	D	C
ATOM	9722	OD1	ASP	D	80	13.554	30.234	-35.014	1.00	36.04	8	D	O
ATOM	9723	OD2	ASP	D	80	15.585	30.339	-35.958	1.00	36.89	8	D	O
ATOM	9724	N	HIS	D	81	16.876	29.283	-31.458	1.00	34.19	7	D	N
ATOM	9725	CA	HIS	D	81	16.846	30.111	-30.264	1.00	31.90	6	D	C
ATOM	9726	C	HIS	D	81	17.854	31.256	-30.282	1.00	32.56	6	D	C
ATOM	9727	O	HIS	D	81	17.645	32.286	-29.636	1.00	29.70	8	D	O
ATOM	9728	CB	HIS	D	81	17.092	29.218	-29.013	1.00	29.81	6	D	C
ATOM	9729	CG	HIS	D	81	16.987	30.040	-27.767	1.00	29.70	6	D	C
ATOM	9730	ND1	HIS	D	81	15.818	30.716	-27.472	1.00	29.65	7	D	N
ATOM	9731	CD2	HIS	D	81	17.852	30.313	-26.753	1.00	28.23	6	D	C
ATOM	9732	CE1	HIS	D	81	15.969	31.412	-26.361	1.00	27.48	6	D	C
ATOM	9733	NE2	HIS	D	81	17.171	31.155	-25.908	1.00	28.41	7	D	N
ATOM	9734	N	GLN	D	82	18.985	31.087	-30.966	1.00	33.72	7	D	N
ATOM	9735	CA	GLN	D	82	19.979	32.153	-31.011	1.00	37.00	6	D	C
ATOM	9736	C	GLN	D	82	19.412	33.413	-31.689	1.00	38.62	6	D	C
ATOM	9737	O	GLN	D	82	20.044	34.464	-31.576	1.00	38.27	8	D	O
ATOM	9738	CB	GLN	D	82	21.273	31.722	-31.700	1.00	39.49	6	D	C
ATOM	9739	CG	GLN	D	82	22.023	30.564	-31.064	1.00	42.81	6	D	C
ATOM	9740	CD	GLN	D	82	22.261	30.682	-29.574	1.00	44.58	6	D	C
ATOM	9741	OE1	GLN	D	82	21.884	29.784	-28.813	1.00	44.25	8	D	O
ATOM	9742	NE2	GLN	D	82	22.854	31.785	-29.131	1.00	45.15	7	D	N
ATOM	9743	N	LYS	D	83	18.250	33.305	-32.341	1.00	37.97	7	D	N
ATOM	9744	CA	LYS	D	83	17.675	34.536	-32.924	1.00	39.43	6	D	C
ATOM	9745	C	LYS	D	83	16.664	35.159	-31.970	1.00	38.10	6	D	C
ATOM	9746	O	LYS	D	83	16.306	36.338	-32.057	1.00	37.35	8	D	O
ATOM	9747	CB	LYS	D	83	17.218	34.326	-34.349	1.00	42.02	6	D	C
ATOM	9748	CG	LYS	D	83	15.914	33.693	-34.722	1.00	47.01	6	D	C
ATOM	9749	CD	LYS	D	83	15.703	33.567	-36.230	1.00	49.30	6	D	C
ATOM	9750	CE	LYS	D	83	14.286	33.105	-36.595	1.00	51.09	6	D	C
ATOM	9751	NZ	LYS	D	83	14.317	32.002	-37.611	1.00	49.76	7	D	N
ATOM	9752	N	TRP	D	84	16.277	34.442	-30.923	1.00	33.55	7	D	N
ATOM	9753	CA	TRP	D	84	15.320	34.921	-29.936	1.00	31.63	6	D	C
ATOM	9754	C	TRP	D	84	15.897	35.054	-28.528	1.00	31.92	6	D	C
ATOM	9755	O	TRP	D	84	15.127	34.958	-27.551	1.00	30.63	8	D	O
ATOM	9756	CB	TRP	D	84	14.232	33.834	-29.881	1.00	30.09	6	D	C
ATOM	9757	CG	TRP	D	84	13.561	33.509	-31.178	1.00	27.78	6	D	C
ATOM	9758	CD1	TRP	D	84	14.029	32.705	-32.175	1.00	25.51	6	D	C
ATOM	9759	CD2	TRP	D	84	12.277	33.973	-31.607	1.00	27.98	6	D	C
ATOM	9760	NE1	TRP	D	84	13.099	32.595	-33.175	1.00	26.54	7	D	N
ATOM	9761	CE2	TRP	D	84	12.015	33.393	-32.869	1.00	27.11	6	D	C
ATOM	9762	CE3	TRP	D	84	11.310	34.813	-31.047	1.00	28.89	6	D	C
ATOM	9763	C22	TRP	D	84	10.852	33.658	-33.583	1.00	27.91	6	D	C
ATOM	9764	C23	TRP	D	84	10.143	35.067	-31.742	1.00	28.08	6	D	C
ATOM	9765	CH2	TRP	D	84	9.927	34.479	-32.999	1.00	27.43	6	D	C
ATOM	9766	N	LEU	D	85	17.186	35.325	-28.368	1.00	30.18	7	D	N
ATOM	9767	CA	LEU	D	85	17.776	35.400	-27.031	1.00	30.32	6	D	C
ATOM	9768	C	LEU	D	85	17.188	36.394	-26.040	1.00	29.48	6	D	C
ATOM	9769	O	LEU	D	85	17.054	36.116	-24.841	1.00	28.95	8	D	O
ATOM	9770	CB	LEU	D	85	19.277	35.636	-27.159	1.00	31.79	6	D	C
ATOM	9771	CG	LEU	D	85	20.022	34.515	-27.901	1.00	32.03	6	D	C
ATOM	9772	CD1	LEU	D	85	21.397	35.062	-28.284	1.00	31.98	6	D	C
ATOM	9773	CD2	LEU	D	85	20.168	33.270	-27.029	1.00	31.67	6	D	C
ATOM	9774	N	ASP	D	86	16.888	37.605	-26.479	1.00	28.39	7	D	N
ATOM	9775	CA	ASP	D	86	16.240	38.622	-25.678	1.00	30.64	6	D	C
ATOM	9776	C	ASP	D	86	14.734	38.340	-25.549	1.00	27.34	6	D	C
ATOM	9777	O	ASP	D	86	14.244	38.168	-24.442	1.00	26.25	8	D	O
ATOM	9778	CB	ASP	D	86	16.455	40.021	-26.302	1.00	35.17	6	D	C
ATOM	9779	CG	ASP	D	86	16.126	40.109	-27.780	1.00	38.54	6	D	C
ATOM	9780	OD1	ASP	D	86	16.120	39.103	-28.534	1.00	39.10	8	D	O
ATOM	9781	OD2	ASP	D	86	15.954	41.248	-28.308	1.00	42.13	8	D	O
ATOM	9782	N	ILE	D	87	14.044	38.162	-26.674	1.00	25.50	7	D	N
ATOM	9783	CA	ILE	D	87	12.616	37.931	-26.720	1.00	25.97	6	D	C
ATOM	9784	C	ILE	D	87	12.202	36.772	-25.801	1.00	24.99	6	D	C
ATOM	9785	O	ILE	D	87	11.169	36.881	-25.177	1.00	24.64	8	D	O
ATOM	9786	CB	ILE	D	87	12.095	37.606	-28.134	1.00	26.69	6	D	C
ATOM	9787	CG1	ILE	D	87	12.318	38.795	-29.104	1.00	29.05	6	D	C
ATOM	9788	CG2	ILE	D	87	10.609	37.262	-28.182	1.00	24.52	6	D	C
ATOM	9789	CD1	ILE	D	87	12.366	38.337	-30.574	1.00	29.60	6	D	C

125/188

ATOM	9790	N	MET	D	88	12.994	35.705	-25.777	1.00	24.72	7	D	N
ATOM	9791	CA	MET	D	88	12.631	34.506	-25.004	1.00	25.50	6	D	C
ATOM	9792	C	MET	D	88	13.534	34.254	-23.814	1.00	25.45	6	D	C
ATOM	9793	O	MET	D	88	13.322	33.232	-23.149	1.00	26.82	8	D	O
ATOM	9794	CB	MET	D	88	12.681	33.297	-25.958	1.00	23.10	6	D	C
ATOM	9795	CG	MET	D	88	11.623	33.307	-27.043	1.00	22.59	6	D	C
ATOM	9796	SE	MET	D	88	9.800	33.358	-26.239	1.00	41.53	34	D	SE
ATOM	9797	CE2	MET	D	88	9.716	31.435	-25.721	1.00	25.11	6	D	C
ATOM	9798	N	SER	D	89	14.227	35.297	-23.364	1.00	25.90	7	D	N
ATOM	9799	CA	SER	D	89	15.025	35.192	-22.152	1.00	24.93	6	D	C
ATOM	9800	C	SER	D	89	14.186	34.825	-20.935	1.00	26.00	6	D	C
ATOM	9801	O	SER	D	89	13.158	35.482	-20.725	1.00	23.60	8	D	O
ATOM	9802	CB	SER	D	89	15.629	36.570	-21.816	1.00	26.35	6	D	C
ATOM	9803	OG	SER	D	89	16.342	36.543	-20.591	1.00	27.46	8	D	O
ATOM	9804	N	ALA	D	90	14.707	33.922	-20.092	1.00	25.83	7	D	N
ATOM	9805	CA	ALA	D	90	14.020	33.654	-18.836	1.00	27.44	6	D	C
ATOM	9806	C	ALA	D	90	14.136	34.873	-17.926	1.00	29.06	6	D	C
ATOM	9807	O	ALA	D	90	13.258	35.154	-17.127	1.00	25.17	8	D	O
ATOM	9808	CB	ALA	D	90	14.718	32.488	-18.097	1.00	24.47	6	D	C
ATOM	9809	N	GLU	D	91	15.272	35.595	-17.978	1.00	32.06	7	D	N
ATOM	9810	CA	GLU	D	91	15.442	36.742	-17.074	1.00	35.23	6	D	C
ATOM	9811	C	GLU	D	91	14.760	38.004	-17.611	1.00	34.66	6	D	C
ATOM	9812	O	GLU	D	91	14.586	38.106	-18.818	1.00	33.42	8	D	O
ATOM	9813	CB	GLU	D	91	16.891	37.083	-16.780	1.00	38.67	6	D	C
ATOM	9814	CG	GLU	D	91	17.929	36.568	-17.730	1.00	45.47	6	D	C
ATOM	9815	CD	GLU	D	91	18.242	35.089	-17.570	1.00	48.79	6	D	C
ATOM	9816	OE1	GLU	D	91	17.582	34.261	-18.237	1.00	48.79	8	D	O
ATOM	9817	OE2	GLU	D	91	19.190	34.690	-16.839	1.00	51.85	8	D	O
ATOM	9818	N	ASP	D	92	14.447	38.965	-16.765	1.00	33.97	7	D	N
ATOM	9819	CA	ASP	D	92	13.859	40.220	-17.240	1.00	35.86	6	D	C
ATOM	9820	C	ASP	D	92	14.832	40.982	-18.140	1.00	37.02	6	D	C
ATOM	9821	O	ASP	D	92	16.025	40.743	-18.014	1.00	34.82	8	D	O
ATOM	9822	CB	ASP	D	92	13.456	41.053	-16.023	1.00	35.37	6	D	C
ATOM	9823	CG	ASP	D	92	12.264	41.934	-16.353	1.00	36.34	6	D	C
ATOM	9824	OD1	ASP	D	92	11.952	42.075	-17.551	1.00	32.68	8	D	O
ATOM	9825	OD2	ASP	D	92	11.650	42.479	-15.413	1.00	37.32	8	D	O
ATOM	9826	N	ILE	D	93	14.376	41.777	-19.077	1.00	39.01	7	D	N
ATOM	9827	CA	ILE	D	93	15.120	42.621	-20.000	1.00	43.48	6	D	C
ATOM	9828	C	ILE	D	93	14.510	44.020	-19.951	1.00	49.17	6	D	C
ATOM	9829	O	ILE	D	93	13.393	44.103	-19.412	1.00	47.74	8	D	O
ATOM	9830	CB	ILE	D	93	15.140	42.077	-21.430	1.00	41.58	6	D	C
ATOM	9831	CG1	ILE	D	93	13.746	42.032	-22.068	1.00	40.07	6	D	C
ATOM	9832	CG2	ILE	D	93	15.745	40.667	-21.485	1.00	41.74	6	D	C
ATOM	9833	CD1	ILE	D	93	13.753	41.704	-23.544	1.00	37.91	6	D	C
ATOM	9834	N	GLU	D	94	15.080	45.135	-20.430	1.00	57.55	7	D	N
ATOM	9835	CA	GLU	D	94	14.334	46.397	-20.255	1.00	65.14	6	D	C
ATOM	9836	C	GLU	D	94	13.029	46.563	-21.027	1.00	67.18	6	D	C
ATOM	9837	O	GLU	D	94	13.006	46.226	-22.200	1.00	67.07	8	D	O
ATOM	9838	CB	GLU	D	94	15.156	47.638	-20.523	1.00	68.17	6	D	C
ATOM	9839	CG	GLU	D	94	16.312	47.505	-21.483	1.00	70.46	6	D	C
ATOM	9840	CD	GLU	D	94	17.521	48.225	-20.890	1.00	73.14	6	D	C
ATOM	9841	OE1	GLU	D	94	17.596	48.393	-19.649	1.00	73.69	8	D	O
ATOM	9842	OE2	GLU	D	94	18.387	48.599	-21.714	1.00	74.04	8	D	O
ATOM	9843	N	ASP	D	95	12.013	47.104	-20.365	1.00	70.84	7	D	N
ATOM	9844	CA	ASP	D	95	10.703	47.366	-20.920	1.00	73.72	6	D	C
ATOM	9845	C	ASP	D	95	10.740	47.450	-22.449	1.00	74.23	6	D	C
ATOM	9846	O	ASP	D	95	10.055	46.830	-23.243	1.00	72.37	8	D	O
ATOM	9847	CB	ASP	D	95	10.198	48.727	-20.412	1.00	75.74	6	D	C
ATOM	9848	CG	ASP	D	95	9.213	48.725	-19.265	1.00	77.88	6	D	C
ATOM	9849	OD1	ASP	D	95	9.517	47.936	-18.334	1.00	77.91	8	D	O
ATOM	9850	OD2	ASP	D	95	8.209	49.495	-19.337	1.00	77.59	8	D	O
ATOM	9851	N	ARG	D	96	11.625	48.320	-22.893	1.00	75.39	7	D	N
ATOM	9852	CA	ARG	D	96	11.839	48.777	-24.239	1.00	77.33	6	D	C
ATOM	9853	C	ARG	D	96	12.060	47.672	-25.258	1.00	76.18	6	D	C
ATOM	9854	O	ARG	D	96	11.703	47.859	-26.427	1.00	75.89	8	D	O
ATOM	9855	CB	ARG	D	96	13.028	49.760	-24.237	1.00	80.50	6	D	C
ATOM	9856	CG	ARG	D	96	13.263	50.385	-22.867	1.00	84.25	6	D	C
ATOM	9857	CD	ARG	D	96	14.490	51.254	-22.747	1.00	87.09	6	D	C
ATOM	9858	NE	ARG	D	96	15.738	50.622	-23.140	1.00	89.15	7	D	N
ATOM	9859	CZ	ARG	D	96	16.254	50.619	-24.366	1.00	90.33	6	D	C
ATOM	9860	NH1	ARG	D	96	15.633	51.230	-25.373	1.00	90.76	7	D	N
ATOM	9861	NH2	ARG	D	96	17.405	49.989	-24.573	1.00	90.68	7	D	N
ATOM	9862	N	LEU	D	97	12.610	46.529	-24.858	1.00	73.52	7	D	N
ATOM	9863	CA	LEU	D	97	12.835	45.431	-25.783	1.00	71.24	6	D	C
ATOM	9864	C	LEU	D	97	11.681	44.426	-25.786	1.00	68.81	6	D	C
ATOM	9865	O	LEU	D	97	11.511	43.666	-26.736	1.00	66.44	8	D	O
ATOM	9866	CB	LEU	D	97	14.123	44.682	-25.447	1.00	71.67	6	D	C
ATOM	9867	CG	LEU	D	97	15.488	45.307	-25.561	1.00	71.90	6	D	C
ATOM	9868	CD1	LEU	D	97	16.566	44.425	-24.968	1.00	71.72	6	D	C

126/188

ATOM	9869	CD2	LEU	D	97	15.838	45.792	-26.949	1.00	72.21	6	D	C
ATOM	9870	N	LYS	D	98	10.903	44.388	-24.719	1.00	66.94	7	D	N
ATOM	9871	CA	LYS	D	98	9.801	43.442	-24.583	1.00	65.41	6	D	C
ATOM	9872	C	LYS	D	98	8.770	43.516	-25.700	1.00	65.30	6	D	C
ATOM	9873	O	LYS	D	98	8.105	42.554	-26.109	1.00	64.39	8	D	O
ATOM	9874	CB	LYS	D	98	9.161	43.632	-23.198	1.00	63.73	6	D	C
ATOM	9875	CG	LYS	D	98	10.114	43.352	-22.046	1.00	61.24	6	D	C
ATOM	9876	CD	LYS	D	98	9.372	43.363	-20.719	1.00	60.10	6	D	C
ATOM	9877	CE	LYS	D	98	10.339	43.335	-19.556	1.00	58.20	6	D	C
ATOM	9878	NZ	LYS	D	98	9.689	43.607	-18.256	1.00	57.30	7	D	N
ATOM	9879	N	SER	D	99	8.650	44.688	-26.306	1.00	64.67	7	D	N
ATOM	9880	CA	SER	D	99	7.680	44.979	-27.348	1.00	64.24	6	D	C
ATOM	9881	C	SER	D	99	7.924	44.155	-28.596	1.00	62.95	6	D	C
ATOM	9882	O	SER	D	99	7.129	44.017	-29.519	1.00	62.20	8	D	O
ATOM	9883	CB	SER	D	99	7.819	46.469	-27.718	1.00	65.38	6	D	C
ATOM	9884	OG	SER	D	99	8.338	47.182	-26.596	1.00	67.68	8	D	O
ATOM	9885	N	LYS	D	100	9.134	43.616	-28.669	1.00	61.40	7	D	N
ATOM	9886	CA	LYS	D	100	9.598	42.862	-29.822	1.00	59.73	6	D	C
ATOM	9887	C	LYS	D	100	8.859	41.549	-30.050	1.00	57.07	6	D	C
ATOM	9888	O	LYS	D	100	8.855	40.631	-29.230	1.00	54.46	8	D	O
ATOM	9889	CB	LYS	D	100	11.083	42.579	-29.630	1.00	61.51	6	D	C
ATOM	9890	CG	LYS	D	100	11.997	43.110	-30.717	1.00	63.53	6	D	C
ATOM	9891	CD	LYS	D	100	13.419	43.138	-30.153	1.00	65.24	6	D	C
ATOM	9892	CE	LYS	D	100	14.451	43.174	-31.266	1.00	66.49	6	D	C
ATOM	9893	NZ	LYS	D	100	15.820	42.863	-30.760	1.00	67.10	7	D	N
ATOM	9894	N	ARG	D	101	8.340	41.410	-31.264	1.00	54.52	7	D	N
ATOM	9895	CA	ARG	D	101	7.561	40.254	-31.673	1.00	53.37	6	D	C
ATOM	9896	C	ARG	D	101	6.350	40.017	-30.756	1.00	48.98	6	D	C
ATOM	9897	O	ARG	D	101	5.855	38.900	-30.677	1.00	45.92	8	D	O
ATOM	9898	CB	ARG	D	101	8.388	38.991	-31.851	1.00	56.85	6	D	C
ATOM	9899	CG	ARG	D	101	9.352	38.862	-32.998	1.00	61.01	6	D	C
ATOM	9900	CD	ARG	D	101	9.229	39.792	-34.168	1.00	64.41	6	D	C
ATOM	9901	NE	ARG	D	101	7.898	40.074	-34.679	1.00	68.17	7	D	N
ATOM	9902	CZ	ARG	D	101	7.399	41.308	-34.841	1.00	70.14	6	D	C
ATOM	9903	NH1	ARG	D	101	8.055	42.424	-34.526	1.00	70.76	7	D	N
ATOM	9904	NH2	ARG	D	101	6.162	41.409	-35.314	1.00	71.35	7	D	N
ATOM	9905	N	LYS	D	102	5.878	41.082	-30.119	1.00	44.87	7	D	N
ATOM	9906	CA	LYS	D	102	4.710	41.023	-29.243	1.00	43.34	6	D	C
ATOM	9907	C	LYS	D	102	3.464	40.811	-30.095	1.00	40.99	6	D	C
ATOM	9908	O	LYS	D	102	3.327	41.492	-31.117	1.00	40.34	8	D	O
ATOM	9909	CB	LYS	D	102	4.594	42.293	-28.404	1.00	43.13	6	D	C
ATOM	9910	CG	LYS	D	102	3.344	42.412	-27.564	1.00	43.45	6	D	C
ATOM	9911	CD	LYS	D	102	3.228	43.776	-26.932	1.00	43.94	6	D	C
ATOM	9912	CE	LYS	D	102	1.953	43.967	-26.123	1.00	44.34	6	D	C
ATOM	9913	NZ	LYS	D	102	1.984	45.271	-25.396	1.00	44.61	7	D	N
ATOM	9914	N	ILE	D	103	2.622	39.837	-29.752	1.00	36.56	7	D	N
ATOM	9915	CA	ILE	D	103	1.449	39.540	-30.538	1.00	33.71	6	D	C
ATOM	9916	C	ILE	D	103	0.148	40.018	-29.887	1.00	31.78	6	D	C
ATOM	9917	O	ILE	D	103	-0.185	39.569	-28.783	1.00	29.23	8	D	O
ATOM	9918	CB	ILE	D	103	1.271	38.037	-30.816	1.00	33.35	6	D	C
ATOM	9919	CG1	ILE	D	103	2.438	37.554	-31.698	1.00	35.90	6	D	C
ATOM	9920	CG2	ILE	D	103	-0.045	37.727	-31.468	1.00	32.06	6	D	C
ATOM	9921	CD1	ILE	D	103	2.514	36.043	-31.741	1.00	37.11	6	D	C
ATOM	9922	N	THR	D	104	-0.572	40.827	-30.644	1.00	27.64	7	D	N
ATOM	9923	CA	THR	D	104	-1.878	41.336	-30.223	1.00	28.20	6	D	C
ATOM	9924	C	THR	D	104	-2.965	40.971	-31.228	1.00	27.62	6	D	C
ATOM	9925	O	THR	D	104	-4.105	41.415	-31.068	1.00	26.98	8	D	O
ATOM	9926	CB	THR	D	104	-1.858	42.888	-30.139	1.00	28.93	6	D	C
ATOM	9927	OG1	THR	D	104	-1.289	43.360	-31.378	1.00	26.32	8	D	O
ATOM	9928	CG2	THR	D	104	-1.006	43.367	-28.977	1.00	30.10	6	D	C
ATOM	9929	N	HIS	D	105	-2.657	40.199	-32.266	1.00	28.09	7	D	N
ATOM	9930	CA	HIS	D	105	-3.656	39.878	-33.308	1.00	29.74	6	D	C
ATOM	9931	C	HIS	D	105	-3.789	38.358	-33.318	1.00	29.29	6	D	C
ATOM	9932	O	HIS	D	105	-2.980	37.662	-33.933	1.00	28.85	8	D	O
ATOM	9933	CB	HIS	D	105	-3.220	40.369	-34.701	1.00	33.99	6	D	C
ATOM	9934	CG	HIS	D	105	-3.002	41.848	-34.713	1.00	38.23	6	D	C
ATOM	9935	ND1	HIS	D	105	-1.841	42.459	-35.107	1.00	41.53	7	D	N
ATOM	9936	CD2	HIS	D	105	-3.827	42.850	-34.313	1.00	40.01	6	D	C
ATOM	9937	CE1	HIS	D	105	-1.951	43.775	-34.964	1.00	41.49	6	D	C
ATOM	9938	NE2	HIS	D	105	-3.151	44.042	-34.485	1.00	41.07	7	D	N
ATOM	9939	N	PRO	D	106	-4.789	37.841	-32.586	1.00	26.06	7	D	N
ATOM	9940	CA	PRO	D	106	-4.963	36.415	-32.466	1.00	24.47	6	D	C
ATOM	9941	C	PRO	D	106	-5.280	35.714	-33.759	1.00	25.11	6	D	C
ATOM	9942	O	PRO	D	106	-6.068	36.190	-34.575	1.00	24.14	8	D	O
ATOM	9943	CB	PRO	D	106	-6.053	36.282	-31.406	1.00	25.14	6	D	C
ATOM	9944	CG	PRO	D	106	-6.834	37.567	-31.571	1.00	26.53	6	D	C
ATOM	9945	CD	PRO	D	106	-5.764	38.607	-31.813	1.00	24.45	6	D	C
ATOM	9946	N	ARG	D	107	-4.721	34.503	-33.921	1.00	24.51	7	D	N
ATOM	9947	CA	ARG	D	107	-5.095	33.837	-35.162	1.00	25.02	6	D	C

127/188

ATOM	9948	C	ARG	D	107	-6.234	32.852	-34.979	1.00	23.56	6	D	C
ATOM	9949	O	ARG	D	107	-6.287	32.040	-34.075	1.00	21.71	8	D	O
ATOM	9950	CB	ARG	D	107	-3.903	33.316	-35.894	1.00	27.99	6	D	C
ATOM	9951	CG	ARG	D	107	-3.133	32.206	-35.280	1.00	32.08	6	D	C
ATOM	9952	CD	ARG	D	107	-1.625	32.534	-35.629	1.00	32.16	6	D	C
ATOM	9953	NE	ARG	D	107	-0.983	32.017	-34.447	1.00	30.86	7	D	N
ATOM	9954	CZ	ARG	D	107	0.023	31.246	-34.151	1.00	32.13	6	D	C
ATOM	9955	NH1	ARG	D	107	0.767	30.743	-35.123	1.00	31.27	7	D	N
ATOM	9956	NH2	ARG	D	107	0.267	30.996	-32.859	1.00	30.23	7	D	N
ATOM	9957	N	PRO	D	108	-7.231	33.000	-35.843	1.00	22.85	7	D	N
ATOM	9958	CA	PRO	D	108	-8.376	32.107	-35.878	1.00	22.44	6	D	C
ATOM	9959	C	PRO	D	108	-7.813	30.692	-36.004	1.00	23.51	6	D	C
ATOM	9960	O	PRO	D	108	-6.778	30.461	-36.639	1.00	22.88	8	D	O
ATOM	9961	CB	PRO	D	108	-9.161	32.614	-37.083	1.00	24.91	6	D	C
ATOM	9962	CG	PRO	D	108	-8.767	34.106	-37.041	1.00	23.49	6	D	C
ATOM	9963	CD	PRO	D	108	-7.264	33.965	-36.998	1.00	21.36	6	D	C
ATOM	9964	N	GLY	D	109	-8.472	29.773	-35.276	1.00	21.66	7	D	N
ATOM	9965	CA	GLY	D	109	-8.104	28.400	-35.238	1.00	22.44	6	D	C
ATOM	9966	C	GLY	D	109	-6.939	28.070	-34.309	1.00	21.84	6	D	C
ATOM	9967	O	GLY	D	109	-6.795	26.882	-34.005	1.00	22.56	8	D	O
ATOM	9968	N	HIS	D	110	-6.267	29.057	-33.732	1.00	20.02	7	D	N
ATOM	9969	CA	HIS	D	110	-5.151	28.684	-32.832	1.00	21.37	6	D	C
ATOM	9970	C	HIS	D	110	-5.485	28.938	-31.374	1.00	22.91	6	D	C
ATOM	9971	O	HIS	D	110	-6.579	29.452	-31.080	1.00	19.52	8	D	O
ATOM	9972	CB	HIS	D	110	-3.948	29.418	-33.375	1.00	23.73	6	D	C
ATOM	9973	CG	HIS	D	110	-2.661	28.666	-33.285	1.00	25.99	6	D	C
ATOM	9974	ND1	HIS	D	110	-2.119	28.337	-32.046	1.00	30.30	7	D	N
ATOM	9975	CD2	HIS	D	110	-1.857	28.165	-34.228	1.00	26.64	6	D	C
ATOM	9976	CE1	HIS	D	110	-0.982	27.685	-32.242	1.00	30.19	6	D	C
ATOM	9977	NE2	HIS	D	110	-0.809	27.595	-33.551	1.00	31.06	7	D	N
ATOM	9978	N	ALA	D	111	-4.570	28.698	-30.435	1.00	21.60	7	D	N
ATOM	9979	CA	ALA	D	111	-4.858	28.932	-29.033	1.00	21.94	6	D	C
ATOM	9980	C	ALA	D	111	-4.639	30.376	-28.576	1.00	22.97	6	D	C
ATOM	9981	O	ALA	D	111	-4.901	30.705	-27.407	1.00	23.73	8	D	O
ATOM	9982	CB	ALA	D	111	-3.928	27.997	-28.224	1.00	21.70	6	D	C
ATOM	9983	N	ASP	D	112	-4.174	31.267	-29.432	1.00	22.65	7	D	N
ATOM	9984	CA	ASP	D	112	-3.798	32.615	-29.015	1.00	22.31	6	D	C
ATOM	9985	C	ASP	D	112	-4.793	33.324	-28.115	1.00	21.56	6	D	C
ATOM	9986	O	ASP	D	112	-4.399	33.732	-27.015	1.00	21.13	8	D	O
ATOM	9987	CB	ASP	D	112	-3.552	33.543	-30.229	1.00	23.89	6	D	C
ATOM	9988	CG	ASP	D	112	-2.650	32.871	-31.266	1.00	27.42	6	D	C
ATOM	9989	OD1	ASP	D	112	-2.070	31.794	-31.025	1.00	22.68	8	D	O
ATOM	9990	OD2	ASP	D	112	-2.531	33.420	-32.376	1.00	26.51	8	D	O
ATOM	9991	N	LEU	D	113	-6.008	33.624	-28.607	1.00	20.37	7	D	N
ATOM	9992	CA	LEU	D	113	-6.925	34.456	-27.859	1.00	20.28	6	D	C
ATOM	9993	C	LEU	D	113	-7.418	33.807	-26.560	1.00	19.72	6	D	C
ATOM	9994	O	LEU	D	113	-7.463	34.474	-25.534	1.00	18.50	8	D	O
ATOM	9995	CB	LEU	D	113	-8.172	34.868	-28.656	1.00	18.35	6	D	C
ATOM	9996	CG	LEU	D	113	-9.260	35.685	-27.960	1.00	18.97	6	D	C
ATOM	9997	CD1	LEU	D	113	-8.766	36.979	-27.331	1.00	16.30	6	D	C
ATOM	9998	CD2	LEU	D	113	-10.357	35.995	-29.019	1.00	19.51	6	D	C
ATOM	9999	N	VAL	D	114	-7.864	32.567	-26.697	1.00	17.86	7	D	N
ATOM	10000	CA	VAL	D	114	-8.398	31.887	-25.488	1.00	19.65	6	D	C
ATOM	10001	C	VAL	D	114	-7.345	31.664	-24.422	1.00	18.68	6	D	C
ATOM	10002	O	VAL	D	114	-7.603	31.877	-23.230	1.00	18.01	8	D	O
ATOM	10003	CB	VAL	D	114	-9.117	30.610	-25.926	1.00	18.45	6	D	C
ATOM	10004	CG1	VAL	D	114	-9.655	29.838	-24.713	1.00	20.14	6	D	C
ATOM	10005	CG2	VAL	D	114	-10.305	31.013	-26.813	1.00	17.05	6	D	C
ATOM	10006	N	GLY	D	115	-6.104	31.436	-24.850	1.00	18.84	7	D	N
ATOM	10007	CA	GLY	D	115	-4.960	31.265	-23.959	1.00	17.17	6	D	C
ATOM	10008	C	GLY	D	115	-4.703	32.625	-23.292	1.00	18.50	6	D	C
ATOM	10009	O	GLY	D	115	-4.406	32.672	-22.101	1.00	15.82	8	D	O
ATOM	10010	N	GLY	D	116	-4.905	33.711	-24.046	1.00	18.92	7	D	N
ATOM	10011	CA	GLY	D	116	-4.733	35.050	-23.419	1.00	17.68	6	D	C
ATOM	10012	C	GLY	D	116	-5.814	35.309	-22.376	1.00	18.64	6	D	C
ATOM	10013	O	GLY	D	116	-5.511	35.909	-21.364	1.00	18.94	8	D	O
ATOM	10014	N	ILE	D	117	-7.080	34.972	-22.612	1.00	17.97	7	D	N
ATOM	10015	CA	ILE	D	117	-8.152	35.177	-21.615	1.00	18.55	6	D	C
ATOM	10016	C	ILE	D	117	-7.950	34.333	-20.363	1.00	18.44	6	D	C
ATOM	10017	O	ILE	D	117	-7.937	34.752	-19.191	1.00	19.11	8	D	O
ATOM	10018	CB	ILE	D	117	-9.509	34.883	-22.280	1.00	17.15	6	D	C
ATOM	10019	CG1	ILE	D	117	-9.808	36.008	-23.312	1.00	19.02	6	D	C
ATOM	10020	CG2	ILE	D	117	-10.692	34.889	-21.293	1.00	18.01	6	D	C
ATOM	10021	CD1	ILE	D	117	-10.883	35.566	-24.305	1.00	16.49	6	D	C
ATOM	10022	N	LYS	D	118	-7.669	33.044	-20.520	1.00	18.62	7	D	N
ATOM	10023	CA	LYS	D	118	-7.435	32.070	-19.487	1.00	18.16	6	D	C
ATOM	10024	C	LYS	D	118	-6.265	32.391	-18.544	1.00	19.90	6	D	C
ATOM	10025	O	LYS	D	118	-6.450	32.381	-17.339	1.00	18.31	8	D	O
ATOM	10026	CB	LYS	D	118	-7.177	30.678	-20.095	1.00	16.58	6	D	C

128/188

ATOM	10027	CG	LYS	D	118	-7.062	29.569	-19.040	1.00	16.59	6	D	C
ATOM	10028	CD	LYS	D	118	-6.605	28.278	-19.733	1.00	16.09	6	D	C
ATOM	10029	CE	LYS	D	118	-6.367	27.126	-18.776	1.00	13.81	6	D	C
ATOM	10030	NZ	LYS	D	118	-7.560	26.625	-18.011	1.00	14.80	7	D	N
ATOM	10031	N	TYR	D	119	-5.137	32.806	-19.118	1.00	18.64	7	D	N
ATOM	10032	CA	TYR	D	119	-3.924	33.103	-18.402	1.00	18.68	6	D	C
ATOM	10033	C	TYR	D	119	-3.662	34.593	-18.203	1.00	19.67	6	D	C
ATOM	10034	O	TYR	D	119	-2.724	34.993	-17.510	1.00	16.35	8	D	O
ATOM	10035	CB	TYR	D	119	-2.739	32.444	-19.165	1.00	18.56	6	D	C
ATOM	10036	CG	TYR	D	119	-2.802	30.926	-19.059	1.00	19.54	6	D	C
ATOM	10037	CD1	TYR	D	119	-2.939	30.122	-20.179	1.00	21.26	6	D	C
ATOM	10038	CD2	TYR	D	119	-2.706	30.307	-17.817	1.00	19.13	6	D	C
ATOM	10039	CE1	TYR	D	119	-2.967	28.736	-20.076	1.00	20.70	6	D	C
ATOM	10040	CE2	TYR	D	119	-2.718	28.916	-17.701	1.00	20.50	6	D	C
ATOM	10041	CZ	TYR	D	119	-2.793	28.149	-18.835	1.00	20.48	6	D	C
ATOM	10042	OH	TYR	D	119	-2.902	26.783	-18.705	1.00	19.54	8	D	O
ATOM	10043	N	ARG	D	120	-4.586	35.402	-18.726	1.00	18.38	7	D	N
ATOM	10044	CA	ARG	D	120	-4.524	36.850	-18.625	1.00	19.46	6	D	C
ATOM	10045	C	ARG	D	120	-3.237	37.472	-19.146	1.00	21.24	6	D	C
ATOM	10046	O	ARG	D	120	-2.523	38.225	-18.459	1.00	19.56	8	D	O
ATOM	10047	CB	ARG	D	120	-4.846	37.271	-17.186	1.00	19.51	6	D	C
ATOM	10048	CG	ARG	D	120	-6.289	36.834	-16.831	1.00	19.41	6	D	C
ATOM	10049	CD	ARG	D	120	-6.661	37.393	-15.446	1.00	22.24	6	D	C
ATOM	10050	NE	ARG	D	120	-7.979	36.984	-14.980	1.00	21.56	7	D	N
ATOM	10051	CZ	ARG	D	120	-8.642	37.448	-13.919	1.00	22.77	6	D	C
ATOM	10052	NH1	ARG	D	120	-8.079	38.385	-13.188	1.00	23.70	7	D	N
ATOM	10053	NH2	ARG	D	120	-9.846	36.960	-13.599	1.00	20.60	7	D	N
ATOM	10054	N	PHE	D	121	-2.904	37.117	-20.393	1.00	21.16	7	D	N
ATOM	10055	CA	PHE	D	121	-1.684	37.634	-21.013	1.00	21.74	6	D	C
ATOM	10056	C	PHE	D	121	-1.870	38.977	-21.694	1.00	22.54	6	D	C
ATOM	10057	O	PHE	D	121	-2.983	39.181	-22.167	1.00	23.35	8	D	O
ATOM	10058	CB	PHE	D	121	-1.234	36.648	-22.107	1.00	21.36	6	D	C
ATOM	10059	CG	PHE	D	121	-0.796	35.284	-21.671	1.00	21.15	6	D	C
ATOM	10060	CD1	PHE	D	121	-1.120	34.187	-22.470	1.00	22.69	6	D	C
ATOM	10061	CD2	PHE	D	121	-0.085	35.057	-20.497	1.00	20.17	6	D	C
ATOM	10062	CE1	PHE	D	121	-0.727	32.905	-22.152	1.00	19.70	6	D	C
ATOM	10063	CE2	PHE	D	121	0.339	33.784	-20.189	1.00	21.32	6	D	C
ATOM	10064	CZ	PHE	D	121	0.025	32.723	-21.014	1.00	20.60	6	D	C
ATOM	10065	N	ASP	D	122	-0.881	39.845	-21.773	1.00	24.51	7	D	N
ATOM	10066	CA	ASP	D	122	-0.938	41.068	-22.575	1.00	28.28	6	D	C
ATOM	10067	C	ASP	D	122	-0.183	40.821	-23.877	1.00	29.11	6	D	C
ATOM	10068	O	ASP	D	122	-0.368	41.530	-24.869	1.00	29.78	8	D	O
ATOM	10069	CB	ASP	D	122	-0.393	42.267	-21.793	1.00	34.70	6	D	C
ATOM	10070	CG	ASP	D	122	-1.212	42.535	-20.546	1.00	39.86	6	D	C
ATOM	10071	OD1	ASP	D	122	-0.738	42.224	-19.420	1.00	43.11	8	D	O
ATOM	10072	OD2	ASP	D	122	-2.368	43.037	-20.644	1.00	42.66	8	D	O
ATOM	10073	N	ASP	D	123	0.561	39.730	-23.976	1.00	27.45	7	D	N
ATOM	10074	CA	ASP	D	123	1.329	39.273	-25.136	1.00	25.91	6	D	C
ATOM	10075	C	ASP	D	123	0.983	37.819	-25.465	1.00	25.25	6	D	C
ATOM	10076	O	ASP	D	123	1.374	36.864	-24.785	1.00	24.78	8	D	O
ATOM	10077	CB	ASP	D	123	2.850	39.383	-24.858	1.00	24.32	6	D	C
ATOM	10078	CG	ASP	D	123	3.694	39.096	-26.090	1.00	24.13	6	D	C
ATOM	10079	OD1	ASP	D	123	4.947	39.222	-26.023	1.00	25.27	8	D	O
ATOM	10080	OD2	ASP	D	123	3.169	38.720	-27.160	1.00	21.55	8	D	O
ATOM	10081	N	LEU	D	124	0.316	37.578	-26.572	1.00	23.59	7	D	N
ATOM	10082	CA	LEU	D	124	-0.184	36.307	-27.012	1.00	22.09	6	D	C
ATOM	10083	C	LEU	D	124	0.939	35.392	-27.470	1.00	23.24	6	D	C
ATOM	10084	O	LEU	D	124	0.611	34.233	-27.681	1.00	22.36	8	D	O
ATOM	10085	CB	LEU	D	124	-1.259	36.486	-28.086	1.00	21.07	6	D	C
ATOM	10086	CG	LEU	D	124	-2.463	37.346	-27.635	1.00	20.93	6	D	C
ATOM	10087	CD1	LEU	D	124	-3.478	37.366	-28.770	1.00	22.97	6	D	C
ATOM	10088	CD2	LEU	D	124	-3.043	36.889	-26.303	1.00	21.33	6	D	C
ATOM	10089	N	ARG	D	125	2.161	35.908	-27.619	1.00	22.77	7	D	N
ATOM	10090	CA	ARG	D	125	3.302	35.038	-27.874	1.00	24.74	6	D	C
ATOM	10091	C	ARG	D	125	3.392	34.085	-26.645	1.00	23.19	6	D	C
ATOM	10092	O	ARG	D	125	3.891	32.941	-26.758	1.00	23.03	8	D	O
ATOM	10093	CB	ARG	D	125	4.642	35.785	-27.952	1.00	24.88	6	D	C
ATOM	10094	CG	ARG	D	125	5.923	34.960	-28.124	1.00	24.58	6	D	C
ATOM	10095	CD	ARG	D	125	7.099	35.839	-28.622	1.00	26.18	6	D	C
ATOM	10096	NE	ARG	D	125	6.751	36.253	-29.995	1.00	29.23	7	D	N
ATOM	10097	CZ	ARG	D	125	6.599	35.476	-31.052	1.00	31.08	6	D	C
ATOM	10098	NH1	ARG	D	125	6.857	34.168	-31.058	1.00	30.06	7	D	N
ATOM	10099	NH2	ARG	D	125	6.142	35.998	-32.199	1.00	32.64	7	D	N
ATOM	10100	N	ASN	D	126	2.886	34.533	-25.516	1.00	22.23	7	D	N
ATOM	10101	CA	ASN	D	126	2.995	33.659	-24.308	1.00	23.24	6	D	C
ATOM	10102	C	ASN	D	126	2.039	32.478	-24.390	1.00	23.46	6	D	C
ATOM	10103	O	ASN	D	126	2.152	31.452	-23.703	1.00	23.25	8	D	O
ATOM	10104	CB	ASN	D	126	2.798	34.407	-23.008	1.00	23.71	6	D	C
ATOM	10105	CG	ASN	D	126	4.009	35.304	-22.726	1.00	25.59	6	D	C

129/188

ATOM	10106	OD1	ASN	D	126	5.138	34.907	-23.018	1.00	24.12	8	D	O
ATOM	10107	ND2	ASN	D	126	3.751	36.493	-22.181	1.00	24.62	7	D	N
ATOM	10108	N	SER	D	127	1.123	32.572	-25.359	1.00	24.69	7	D	N
ATOM	10109	CA	SER	D	127	0.249	31.417	-25.593	1.00	26.26	6	D	C
ATOM	10110	C	SER	D	127	0.846	30.572	-26.728	1.00	24.69	6	D	C
ATOM	10111	O	SER	D	127	0.850	29.335	-26.712	1.00	22.32	8	D	O
ATOM	10112	CB	SER	D	127	-1.185	31.923	-25.846	1.00	28.06	6	D	C
ATOM	10113	OG	SER	D	127	-1.873	30.737	-26.217	1.00	33.27	8	D	O
ATOM	10114	N	LEU	D	128	1.381	31.268	-27.730	1.00	22.22	7	D	N
ATOM	10115	CA	LEU	D	128	1.892	30.681	-28.959	1.00	22.42	6	D	C
ATOM	10116	C	LEU	D	128	3.049	29.761	-28.672	1.00	19.68	6	D	C
ATOM	10117	O	LEU	D	128	3.150	28.678	-29.232	1.00	19.46	8	D	O
ATOM	10118	CB	LEU	D	128	2.299	31.774	-29.969	1.00	26.66	6	D	C
ATOM	10119	CG	LEU	D	128	3.046	31.404	-31.249	1.00	28.90	6	D	C
ATOM	10120	CD1	LEU	D	128	2.949	32.500	-32.314	1.00	29.37	6	D	C
ATOM	10121	CD2	LEU	D	128	4.527	31.129	-31.001	1.00	30.66	6	D	C
ATOM	10122	N	GLU	D	129	4.032	30.288	-27.952	1.00	18.02	7	D	N
ATOM	10123	CA	GLU	D	129	5.260	29.528	-27.661	1.00	17.30	6	D	C
ATOM	10124	C	GLU	D	129	5.001	28.140	-27.085	1.00	18.07	6	D	C
ATOM	10125	O	GLU	D	129	5.736	27.199	-27.398	1.00	15.64	8	D	O
ATOM	10126	CB	GLU	D	129	6.166	30.340	-26.763	1.00	17.59	6	D	C
ATOM	10127	CG	GLU	D	129	6.706	31.580	-27.519	1.00	21.58	6	D	C
ATOM	10128	CD	GLU	D	129	7.658	31.150	-28.632	1.00	23.90	6	D	C
ATOM	10129	OE1	GLU	D	129	8.427	30.148	-28.499	1.00	22.53	8	D	O
ATOM	10130	OE2	GLU	D	129	7.586	31.832	-29.673	1.00	23.28	8	D	O
ATOM	10131	N	ARG	D	130	3.957	27.987	-26.235	1.00	18.78	7	D	N
ATOM	10132	CA	ARG	D	130	3.778	26.614	-25.713	1.00	17.78	6	D	C
ATOM	10133	C	ARG	D	130	2.777	25.873	-26.592	1.00	17.07	6	D	C
ATOM	10134	O	ARG	D	130	2.839	24.618	-26.639	1.00	18.82	8	D	O
ATOM	10135	CB	ARG	D	130	3.369	26.615	-24.222	1.00	18.00	6	D	C
ATOM	10136	CG	ARG	D	130	3.092	25.245	-23.628	1.00	15.56	6	D	C
ATOM	10137	CD	ARG	D	130	4.320	24.352	-23.546	1.00	17.41	6	D	C
ATOM	10138	NE	ARG	D	130	3.987	22.957	-23.195	1.00	16.08	7	D	N
ATOM	10139	CZ	ARG	D	130	4.795	21.919	-23.380	1.00	15.56	6	D	C
ATOM	10140	NH1	ARG	D	130	6.048	21.961	-23.913	1.00	14.65	7	D	N
ATOM	10141	NH2	ARG	D	130	4.236	20.740	-23.056	1.00	13.39	7	D	N
ATOM	10142	N	SER	D	131	1.754	26.519	-27.132	1.00	17.70	7	D	N
ATOM	10143	CA	SER	D	131	0.693	25.750	-27.832	1.00	20.16	6	D	C
ATOM	10144	C	SER	D	131	1.228	25.232	-29.182	1.00	22.68	6	D	C
ATOM	10145	O	SER	D	131	0.652	24.293	-29.767	1.00	19.06	8	D	O
ATOM	10146	CB	SER	D	131	-0.561	26.586	-28.088	1.00	20.68	6	D	C
ATOM	10147	OG	SER	D	131	-0.273	27.600	-29.075	1.00	20.29	8	D	O
ATOM	10148	N	SER	D	132	2.368	25.854	-29.593	1.00	18.30	7	D	N
ATOM	10149	CA	SER	D	132	2.905	25.384	-30.887	1.00	22.19	6	D	C
ATOM	10150	C	SER	D	132	3.189	23.892	-30.931	1.00	20.67	6	D	C
ATOM	10151	O	SER	D	132	3.745	23.333	-29.984	1.00	17.99	8	D	O
ATOM	10152	CB	SER	D	132	4.200	26.176	-31.192	1.00	22.96	6	D	C
ATOM	10153	OG	SER	D	132	5.022	25.438	-32.074	1.00	27.54	8	D	O
ATOM	10154	N	ALA	D	133	3.078	23.283	-32.111	1.00	20.28	7	D	N
ATOM	10155	CA	ALA	D	133	3.336	21.864	-32.288	1.00	20.75	6	D	C
ATOM	10156	C	ALA	D	133	4.823	21.522	-32.225	1.00	18.66	6	D	C
ATOM	10157	O	ALA	D	133	5.167	20.346	-32.422	1.00	19.45	8	D	O
ATOM	10158	CB	ALA	D	133	2.739	21.261	-33.576	1.00	18.54	6	D	C
ATOM	10159	N	ARG	D	134	5.717	22.465	-32.052	1.00	20.32	7	D	N
ATOM	10160	CA	ARG	D	134	7.139	22.121	-31.799	1.00	17.76	6	D	C
ATOM	10161	C	ARG	D	134	7.175	21.083	-30.668	1.00	17.66	6	D	C
ATOM	10162	O	ARG	D	134	7.988	20.158	-30.620	1.00	18.12	8	D	O
ATOM	10163	CB	ARG	D	134	7.861	23.386	-31.318	1.00	17.42	6	D	C
ATOM	10164	CG	ARG	D	134	9.369	23.105	-30.975	1.00	18.65	6	D	C
ATOM	10165	CD	ARG	D	134	10.185	22.982	-32.280	1.00	19.97	6	D	C
ATOM	10166	NE	ARG	D	134	11.632	22.658	-31.921	1.00	21.74	7	D	N
ATOM	10167	CZ	ARG	D	134	12.313	21.720	-32.554	1.00	19.72	6	D	C
ATOM	10168	NH1	ARG	D	134	11.738	21.092	-33.579	1.00	19.65	7	D	N
ATOM	10169	NH2	ARG	D	134	13.578	21.346	-32.312	1.00	20.80	7	D	N
ATOM	10170	N	GLU	D	135	6.189	21.188	-29.776	1.00	18.75	7	D	N
ATOM	10171	CA	GLU	D	135	6.111	20.283	-28.615	1.00	18.83	6	D	C
ATOM	10172	C	GLU	D	135	5.934	18.833	-29.000	1.00	19.73	6	D	C
ATOM	10173	O	GLU	D	135	6.325	17.961	-28.186	1.00	22.16	8	D	O
ATOM	10174	CB	GLU	D	135	4.997	20.689	-27.668	1.00	18.81	6	D	C
ATOM	10175	CG	GLU	D	135	4.763	19.831	-26.439	1.00	19.70	6	D	C
ATOM	10176	CD	GLU	D	135	3.797	18.664	-26.591	1.00	23.57	6	D	C
ATOM	10177	OE1	GLU	D	135	3.839	17.759	-25.703	1.00	21.92	8	D	O
ATOM	10178	OE2	GLU	D	135	3.144	18.575	-27.664	1.00	23.32	8	D	O
ATOM	10179	N	THR	D	136	5.323	18.574	-30.158	1.00	19.06	7	D	N
ATOM	10180	CA	THR	D	136	5.098	17.204	-30.577	1.00	19.18	6	D	C
ATOM	10181	C	THR	D	136	6.433	16.486	-30.795	1.00	19.39	6	D	C
ATOM	10182	O	THR	D	136	6.540	15.249	-30.808	1.00	19.83	8	D	O
ATOM	10183	CB	THR	D	136	4.205	17.114	-31.837	1.00	20.63	6	D	C
ATOM	10184	OG1	THR	D	136	4.829	17.783	-32.935	1.00	17.86	8	D	O

130/188

ATOM	10185	CG2	THR	D	136	2.796	17.677	-31.664	1.00	17.48	6	D	C
ATOM	10186	N	THR	D	137	7.498	17.241	-30.924	1.00	18.18	7	D	N
ATOM	10187	CA	THR	D	137	8.851	16.674	-31.034	1.00	19.47	6	D	C
ATOM	10188	C	THR	D	137	9.149	15.788	-29.796	1.00	20.34	6	D	C
ATOM	10189	O	THR	D	137	9.654	14.642	-29.869	1.00	19.61	8	D	O
ATOM	10190	CB	THR	D	137	9.880	17.815	-31.062	1.00	20.04	6	D	C
ATOM	10191	OG1	THR	D	137	9.604	18.784	-32.104	1.00	20.82	8	D	O
ATOM	10192	CG2	THR	D	137	11.296	17.264	-31.195	1.00	20.00	6	D	C
ATOM	10193	N	MET	D	138	8.694	16.253	-28.626	1.00	18.99	7	D	N
ATOM	10194	CA	MET	D	138	9.021	15.508	-27.398	1.00	17.35	6	D	C
ATOM	10195	C	MET	D	138	7.981	14.379	-27.273	1.00	16.89	6	D	C
ATOM	10196	O	MET	D	138	8.306	13.385	-26.676	1.00	16.01	8	D	O
ATOM	10197	CB	MET	D	138	9.045	16.360	-26.165	1.00	16.48	6	D	C
ATOM	10198	CG	MET	D	138	9.973	17.541	-26.033	1.00	17.36	6	D	C
ATOM	10199	SE	MET	D	138	11.803	16.763	-26.882	1.00	41.53	34	D	SE
ATOM	10200	CE2	MET	D	138	12.217	15.338	-25.446	1.00	23.53	6	D	C
ATOM	10201	N	ARG	D	139	6.784	14.562	-27.823	1.00	15.75	7	D	N
ATOM	10202	CA	ARG	D	139	5.844	13.445	-27.782	1.00	15.77	6	D	C
ATOM	10203	C	ARG	D	139	6.390	12.296	-28.616	1.00	16.16	6	D	C
ATOM	10204	O	ARG	D	139	6.163	11.138	-28.247	1.00	16.29	8	D	O
ATOM	10205	CB	ARG	D	139	4.442	13.871	-28.228	1.00	16.65	6	D	C
ATOM	10206	CG	ARG	D	139	3.830	14.809	-27.153	1.00	15.80	6	D	C
ATOM	10207	CD	ARG	D	139	2.407	15.166	-27.536	1.00	17.79	6	D	C
ATOM	10208	NE	ARG	D	139	1.467	14.158	-27.090	1.00	19.65	7	D	N
ATOM	10209	CZ	ARG	D	139	0.141	14.151	-27.196	1.00	18.86	6	D	C
ATOM	10210	NH1	ARG	D	139	-0.484	15.152	-27.786	1.00	17.72	7	D	N
ATOM	10211	NH2	ARG	D	139	-0.524	13.099	-26.732	1.00	19.02	7	D	N
ATOM	10212	N	VAL	D	140	7.011	12.604	-29.750	1.00	16.93	7	D	N
ATOM	10213	CA	VAL	D	140	7.571	11.557	-30.630	1.00	17.62	6	D	C
ATOM	10214	C	VAL	D	140	8.754	10.900	-29.912	1.00	18.38	6	D	C
ATOM	10215	O	VAL	D	140	8.920	9.684	-29.957	1.00	18.04	8	D	O
ATOM	10216	CB	VAL	D	140	7.996	12.181	-31.972	1.00	17.88	6	D	C
ATOM	10217	CG1	VAL	D	140	8.888	11.269	-32.829	1.00	21.64	6	D	C
ATOM	10218	CG2	VAL	D	140	6.729	12.497	-32.782	1.00	17.15	6	D	C
ATOM	10219	N	ALA	D	141	9.547	11.732	-29.260	1.00	17.15	7	D	N
ATOM	10220	CA	ALA	D	141	10.679	11.237	-28.464	1.00	17.70	6	D	C
ATOM	10221	C	ALA	D	141	10.201	10.231	-27.405	1.00	16.99	6	D	C
ATOM	10222	O	ALA	D	141	10.756	9.152	-27.221	1.00	17.49	8	D	O
ATOM	10223	CB	ALA	D	141	11.342	12.428	-27.778	1.00	15.62	6	D	C
ATOM	10224	N	VAL	D	142	9.097	10.552	-26.699	1.00	18.81	7	D	N
ATOM	10225	CA	VAL	D	142	8.559	9.620	-25.698	1.00	17.68	6	D	C
ATOM	10226	C	VAL	D	142	7.997	8.381	-26.371	1.00	18.22	6	D	C
ATOM	10227	O	VAL	D	142	8.206	7.230	-25.927	1.00	18.01	8	D	O
ATOM	10228	CB	VAL	D	142	7.494	10.367	-24.875	1.00	18.71	6	D	C
ATOM	10229	CG1	VAL	D	142	6.651	9.474	-23.966	1.00	14.75	6	D	C
ATOM	10230	CG2	VAL	D	142	8.107	11.467	-23.975	1.00	16.60	6	D	C
ATOM	10231	N	GLY	D	143	7.316	8.595	-27.526	1.00	16.09	7	D	N
ATOM	10232	CA	GLY	D	143	6.806	7.425	-28.245	1.00	17.86	6	D	C
ATOM	10233	C	GLY	D	143	7.905	6.504	-28.773	1.00	18.47	6	D	C
ATOM	10234	O	GLY	D	143	7.676	5.294	-28.897	1.00	19.17	8	D	O
ATOM	10235	N	ALA	D	144	9.082	7.036	-29.104	1.00	17.87	7	D	N
ATOM	10236	CA	ALA	D	144	10.154	6.146	-29.583	1.00	19.85	6	D	C
ATOM	10237	C	ALA	D	144	10.648	5.230	-28.461	1.00	20.24	6	D	C
ATOM	10238	O	ALA	D	144	10.840	4.026	-28.665	1.00	19.28	8	D	O
ATOM	10239	CB	ALA	D	144	11.249	7.033	-30.165	1.00	17.40	6	D	C
ATOM	10240	N	VAL	D	145	10.683	5.756	-27.236	1.00	18.89	7	D	N
ATOM	10241	CA	VAL	D	145	10.989	4.894	-26.078	1.00	18.06	6	D	C
ATOM	10242	C	VAL	D	145	9.892	3.837	-25.944	1.00	20.18	6	D	C
ATOM	10243	O	VAL	D	145	10.199	2.648	-25.808	1.00	18.22	8	D	O
ATOM	10244	CB	VAL	D	145	11.103	5.720	-24.809	1.00	17.86	6	D	C
ATOM	10245	CG1	VAL	D	145	11.315	4.801	-23.605	1.00	18.92	6	D	C
ATOM	10246	CG2	VAL	D	145	12.190	6.793	-24.920	1.00	16.90	6	D	C
ATOM	10247	N	ALA	D	146	8.605	4.261	-26.046	1.00	18.00	7	D	N
ATOM	10248	CA	ALA	D	146	7.515	3.305	-25.940	1.00	18.83	6	D	C
ATOM	10249	C	ALA	D	146	7.650	2.204	-27.013	1.00	19.27	6	D	C
ATOM	10250	O	ALA	D	146	7.344	1.032	-26.784	1.00	17.84	8	D	O
ATOM	10251	CB	ALA	D	146	6.141	3.976	-26.136	1.00	14.66	6	D	C
ATOM	10252	N	LYS	D	147	7.955	2.658	-28.241	1.00	18.16	7	D	N
ATOM	10253	CA	LYS	D	147	8.158	1.718	-29.336	1.00	18.93	6	D	C
ATOM	10254	C	LYS	D	147	9.267	0.688	-29.088	1.00	19.27	6	D	C
ATOM	10255	O	LYS	D	147	9.068	-0.424	-29.580	1.00	19.39	8	D	O
ATOM	10256	CB	LYS	D	147	8.370	2.432	-30.672	1.00	19.33	6	D	C
ATOM	10257	CG	LYS	D	147	7.107	2.994	-31.291	1.00	17.93	6	D	C
ATOM	10258	CD	LYS	D	147	7.372	3.971	-32.465	1.00	20.47	6	D	C
ATOM	10259	CE	LYS	D	147	8.195	3.302	-33.581	1.00	18.53	6	D	C
ATOM	10260	NZ	LYS	D	147	8.445	4.262	-34.698	1.00	20.64	7	D	N
ATOM	10261	N	ARG	D	148	10.386	1.045	-28.472	1.00	19.80	7	D	N
ATOM	10262	CA	ARG	D	148	11.400	0.055	-28.130	1.00	22.88	6	D	C
ATOM	10263	C	ARG	D	148	10.747	-1.034	-27.291	1.00	22.12	6	D	C

131/188

ATOM	10264	O	ARG	D	148	11.020	-2.243	-27.456	1.00	22.03	8	D	O
ATOM	10265	CB	ARG	D	148	12.604	0.646	-27.400	1.00	20.97	6	D	C
ATOM	10266	CG	ARG	D	148	13.516	1.444	-28.357	1.00	25.60	6	D	C
ATOM	10267	CD	ARG	D	148	14.279	0.481	-29.304	1.00	24.82	6	D	C
ATOM	10268	NE	ARG	D	148	14.841	-0.541	-28.450	1.00	23.83	7	D	N
ATOM	10269	CZ	ARG	D	148	14.735	-1.865	-28.489	1.00	22.78	6	D	C
ATOM	10270	NH1	ARG	D	148	14.078	-2.455	-29.462	1.00	22.06	7	D	N
ATOM	10271	NH2	ARG	D	148	15.297	-2.514	-27.450	1.00	20.81	7	D	N
ATOM	10272	N	LEU	D	149	9.889	-0.630	-26.353	1.00	20.19	7	D	N
ATOM	10273	CA	LEU	D	149	9.229	-1.669	-25.564	1.00	18.91	6	D	C
ATOM	10274	C	LEU	D	149	8.391	-2.609	-26.398	1.00	18.64	6	D	C
ATOM	10275	O	LEU	D	149	8.367	-3.824	-26.156	1.00	19.40	8	D	O
ATOM	10276	CB	LEU	D	149	8.398	-1.085	-24.416	1.00	19.92	6	D	C
ATOM	10277	CG	LEU	D	149	9.136	-0.582	-23.201	1.00	23.04	6	D	C
ATOM	10278	CD1	LEU	D	149	8.187	0.278	-22.348	1.00	23.89	6	D	C
ATOM	10279	CD2	LEU	D	149	9.667	-1.760	-22.389	1.00	21.28	6	D	C
ATOM	10280	N	LEU	D	150	7.518	-2.086	-27.253	1.00	18.26	7	D	N
ATOM	10281	CA	LEU	D	150	6.711	-2.826	-28.158	1.00	18.75	6	D	C
ATOM	10282	C	LEU	D	150	7.592	-3.722	-29.058	1.00	19.47	6	D	C
ATOM	10283	O	LEU	D	150	7.216	-4.849	-29.390	1.00	20.62	8	D	O
ATOM	10284	CB	LEU	D	150	5.887	-1.906	-29.067	1.00	21.13	6	D	C
ATOM	10285	CG	LEU	D	150	4.970	-0.875	-28.412	1.00	22.84	6	D	C
ATOM	10286	CD1	LEU	D	150	4.026	-0.213	-29.415	1.00	22.04	6	D	C
ATOM	10287	CD2	LEU	D	150	4.184	-1.432	-27.236	1.00	23.22	6	D	C
ATOM	10288	N	ALA	D	151	8.716	-3.194	-29.490	1.00	20.29	7	D	N
ATOM	10289	CA	ALA	D	151	9.579	-4.027	-30.363	1.00	20.59	6	D	C
ATOM	10290	C	ALA	D	151	10.070	-5.210	-29.524	1.00	22.99	6	D	C
ATOM	10291	O	ALA	D	151	10.100	-6.349	-30.037	1.00	22.57	8	D	O
ATOM	10292	CB	ALA	D	151	10.711	-3.189	-30.896	1.00	22.16	6	D	C
ATOM	10293	N	GLU	D	152	10.449	-4.971	-28.246	1.00	21.32	7	D	N
ATOM	10294	CA	GLU	D	152	10.946	-6.134	-27.484	1.00	23.11	6	D	C
ATOM	10295	C	GLU	D	152	9.878	-7.171	-27.256	1.00	23.23	6	D	C
ATOM	10296	O	GLU	D	152	10.182	-8.323	-26.842	1.00	20.00	8	D	O
ATOM	10297	CB	GLU	D	152	11.493	-5.713	-26.099	1.00	23.74	6	D	C
ATOM	10298	CG	GLU	D	152	12.726	-4.849	-26.226	1.00	23.34	6	D	C
ATOM	10299	CD	GLU	D	152	13.986	-5.659	-26.485	1.00	24.97	6	D	C
ATOM	10300	OE1	GLU	D	152	14.991	-5.034	-26.785	1.00	23.42	8	D	C
ATOM	10301	OE2	GLU	D	152	14.057	-6.904	-26.418	1.00	26.63	8	D	O
ATOM	10302	N	LEU	D	153	8.629	-6.749	-27.440	1.00	22.27	7	D	N
ATOM	10303	CA	LEU	D	153	7.504	-7.647	-27.215	1.00	25.37	6	D	C
ATOM	10304	C	LEU	D	153	6.924	-8.176	-28.535	1.00	26.58	6	D	C
ATOM	10305	O	LEU	D	153	5.820	-8.708	-28.583	1.00	27.92	8	D	O
ATOM	10306	CB	LEU	D	153	6.407	-7.031	-26.343	1.00	25.62	6	D	C
ATOM	10307	CG	LEU	D	153	6.868	-6.596	-24.952	1.00	26.29	6	D	C
ATOM	10308	CD1	LEU	D	153	5.816	-5.755	-24.220	1.00	26.95	6	D	C
ATOM	10309	CD2	LEU	D	153	7.253	-7.804	-24.107	1.00	25.90	6	D	C
ATOM	10310	N	ASP	D	154	7.640	-7.993	-29.611	1.00	25.96	7	D	N
ATOM	10311	CA	ASP	D	154	7.404	-8.503	-30.927	1.00	30.36	6	D	C
ATOM	10312	C	ASP	D	154	6.153	-7.884	-31.557	1.00	31.00	6	D	C
ATOM	10313	O	ASP	D	154	5.357	-8.633	-32.142	1.00	29.07	8	D	O
ATOM	10314	CB	ASP	D	154	7.190	-10.033	-30.919	1.00	33.78	6	D	C
ATOM	10315	CG	ASP	D	154	8.190	-10.897	-30.199	1.00	36.04	6	D	C
ATOM	10316	OD1	ASP	D	154	9.328	-10.931	-30.701	1.00	36.57	8	D	O
ATOM	10317	OD2	ASP	D	154	7.879	-11.536	-29.154	1.00	37.56	8	D	O
ATOM	10318	N	MET	D	155	5.916	-6.611	-31.242	1.00	28.41	7	D	N
ATOM	10319	CA	MET	D	155	4.777	-5.925	-31.815	1.00	27.65	6	D	C
ATOM	10320	C	MET	D	155	5.271	-4.979	-32.904	1.00	26.47	6	D	C
ATOM	10321	O	MET	D	155	6.476	-4.683	-32.914	1.00	25.57	8	D	O
ATOM	10322	CB	MET	D	155	4.000	-5.178	-30.718	1.00	27.38	6	D	C
ATOM	10323	CG	MET	D	155	3.466	-6.234	-29.752	1.00	27.63	6	D	C
ATOM	10324	SE	MET	D	155	2.766	-5.099	-28.170	1.00	44.13	34	D	SE
ATOM	10325	CE2	MET	D	155	1.535	-4.289	-29.016	1.00	22.52	6	D	C
ATOM	10326	N	GLU	D	156	4.369	-4.609	-33.810	1.00	24.58	7	D	N
ATOM	10327	CA	GLU	D	156	4.805	-3.706	-34.895	1.00	25.45	6	D	C
ATOM	10328	C	GLU	D	156	3.823	-2.554	-35.013	1.00	23.21	6	D	C
ATOM	10329	O	GLU	D	156	2.640	-2.797	-34.778	1.00	23.45	8	D	O
ATOM	10330	CB	GLU	D	156	4.796	-4.468	-36.232	1.00	26.56	6	D	C
ATOM	10331	CG	GLU	D	156	5.830	-5.576	-36.250	1.00	31.81	6	D	C
ATOM	10332	CD	GLU	D	156	5.918	-6.307	-37.574	1.00	34.69	6	D	C
ATOM	10333	OE1	GLU	D	156	5.087	-7.163	-37.911	1.00	36.47	8	D	O
ATOM	10334	OE2	GLU	D	156	6.869	-6.013	-38.328	1.00	37.23	8	D	O
ATOM	10335	N	ILE	D	157	4.280	-1.392	-35.453	1.00	19.55	7	D	N
ATOM	10336	CA	ILE	D	157	3.325	-0.294	-35.568	1.00	20.59	6	D	C
ATOM	10337	C	ILE	D	157	3.703	0.489	-36.836	1.00	20.95	6	D	C
ATOM	10338	O	ILE	D	157	4.852	0.426	-37.246	1.00	19.51	8	D	O
ATOM	10339	CB	ILE	D	157	3.323	0.597	-34.313	1.00	20.10	6	D	C
ATOM	10340	CG1	ILE	D	157	2.204	1.657	-34.380	1.00	21.55	6	D	C
ATOM	10341	CG2	ILE	D	157	4.627	1.333	-34.095	1.00	21.58	6	D	C
ATOM	10342	CD1	ILE	D	157	2.046	2.366	-33.020	1.00	21.93	6	D	C

132/188

ATOM	10343	N	ALA D 158	2.739	1.158	-37.425	1.00	19.52	7	D	N
ATOM	10344	CA	ALA D 158	2.947	1.927	-38.635	1.00	19.18	6	D	C
ATOM	10345	C	ALA D 158	1.832	2.975	-38.726	1.00	18.97	6	D	C
ATOM	10346	O	ALA D 158	0.787	2.847	-38.092	1.00	17.74	8	D	O
ATOM	10347	CB	ALA D 158	2.805	1.035	-39.886	1.00	19.97	6	D	C
ATOM	10348	N	ASN D 159	2.081	3.975	-39.548	1.00	19.64	7	D	N
ATOM	10349	CA	ASN D 159	1.100	5.006	-39.818	1.00	21.84	6	D	C
ATOM	10350	C	ASN D 159	1.084	5.358	-41.293	1.00	20.10	6	D	C
ATOM	10351	O	ASN D 159	2.156	5.375	-41.943	1.00	19.24	8	D	O
ATOM	10352	CB	ASN D 159	1.314	6.272	-38.976	1.00	22.43	6	D	C
ATOM	10353	CG	ASN D 159	2.344	7.258	-39.494	1.00	23.03	6	D	C
ATOM	10354	OD1	ASN D 159	2.003	8.168	-40.262	1.00	21.04	8	D	O
ATOM	10355	ND2	ASN D 159	3.594	7.161	-39.081	1.00	19.04	7	D	N
ATOM	10356	N	HIS D 160	-0.055	5.772	-41.812	1.00	19.80	7	D	N
ATOM	10357	CA	HIS D 160	-0.090	6.206	-43.214	1.00	21.50	6	D	C
ATOM	10358	C	HIS D 160	-1.253	7.172	-43.433	1.00	23.07	6	D	C
ATOM	10359	O	HIS D 160	-2.247	7.102	-42.708	1.00	20.05	8	D	O
ATOM	10360	CB	HIS D 160	-0.181	5.051	-44.197	1.00	22.93	6	D	C
ATOM	10361	CG	HIS D 160	-1.329	4.129	-43.954	1.00	23.28	6	D	C
ATOM	10362	ND1	HIS D 160	-2.245	3.833	-44.944	1.00	25.49	7	D	N
ATOM	10363	CD2	HIS D 160	-1.747	3.474	-42.835	1.00	23.72	6	D	C
ATOM	10364	CE1	HIS D 160	-3.171	3.024	-44.460	1.00	24.30	6	D	C
ATOM	10365	NE2	HIS D 160	-2.917	2.815	-43.176	1.00	23.61	7	D	N
ATOM	10366	N	VAL D 161	-1.096	8.023	-44.442	1.00	20.56	7	D	N
ATOM	10367	CA	VAL D 161	-2.133	8.977	-44.793	1.00	22.16	6	D	C
ATOM	10368	C	VAL D 161	-3.184	8.261	-45.630	1.00	23.78	6	D	C
ATOM	10369	O	VAL D 161	-2.817	7.647	-46.623	1.00	22.65	8	D	O
ATOM	10370	CB	VAL D 161	-1.581	10.191	-45.564	1.00	21.31	6	D	C
ATOM	10371	CG1	VAL D 161	-2.694	11.054	-46.142	1.00	20.40	6	D	C
ATOM	10372	CG2	VAL D 161	-0.684	10.968	-44.607	1.00	20.27	6	D	C
ATOM	10373	N	VAL D 162	-4.454	8.348	-45.204	1.00	22.66	7	D	N
ATOM	10374	CA	VAL D 162	-5.521	7.734	-45.931	1.00	21.40	6	D	C
ATOM	10375	C	VAL D 162	-6.478	8.762	-46.547	1.00	24.04	6	D	C
ATOM	10376	O	VAL D 162	-7.276	8.381	-47.435	1.00	24.31	8	D	O
ATOM	10377	CB	VAL D 162	-6.324	6.720	-45.121	1.00	22.12	6	D	C
ATOM	10378	CG1	VAL D 162	-5.419	5.554	-44.725	1.00	21.47	6	D	C
ATOM	10379	CG2	VAL D 162	-6.976	7.371	-43.901	1.00	23.29	6	D	C
ATOM	10380	N	VAL D 163	-6.347	10.015	-46.164	1.00	21.61	7	D	N
ATOM	10381	CA	VAL D 163	-7.119	11.111	-46.761	1.00	22.16	6	D	C
ATOM	10382	C	VAL D 163	-6.213	12.333	-46.735	1.00	23.03	6	D	C
ATOM	10383	O	VAL D 163	-5.742	12.628	-45.632	1.00	21.90	8	D	O
ATOM	10384	CB	VAL D 163	-8.406	11.509	-46.026	1.00	23.03	6	D	C
ATOM	10385	CG1	VAL D 163	-9.196	12.533	-46.870	1.00	25.44	6	D	C
ATOM	10386	CG2	VAL D 163	-9.326	10.341	-45.772	1.00	21.32	6	D	C
ATOM	10387	N	PHE D 164	-5.919	12.974	-47.860	1.00	21.53	7	D	N
ATOM	10388	CA	PHE D 164	-5.050	14.105	-47.912	1.00	23.68	6	D	C
ATOM	10389	C	PHE D 164	-5.800	15.286	-48.523	1.00	26.36	6	D	C
ATOM	10390	O	PHE D 164	-6.027	15.416	-49.739	1.00	25.66	8	D	O
ATOM	10391	CB	PHE D 164	-3.758	13.754	-48.686	1.00	22.70	6	D	C
ATOM	10392	CG	PHE D 164	-2.570	14.512	-48.171	1.00	22.98	6	D	C
ATOM	10393	CD1	PHE D 164	-1.367	13.863	-47.941	1.00	22.96	6	D	C
ATOM	10394	CD2	PHE D 164	-2.650	15.858	-47.842	1.00	21.95	6	D	C
ATOM	10395	CE1	PHE D 164	-0.296	14.594	-47.471	1.00	19.94	6	D	C
ATOM	10396	CE2	PHE D 164	-1.600	16.566	-47.326	1.00	20.04	6	D	C
ATOM	10397	CZ	PHE D 164	-0.368	15.926	-47.177	1.00	18.11	6	D	C
ATOM	10398	N	GLY D 165	-6.280	16.173	-47.659	1.00	25.35	7	D	N
ATOM	10399	CA	GLY D 165	-6.995	17.359	-48.101	1.00	26.93	6	D	C
ATOM	10400	C	GLY D 165	-8.206	17.004	-48.953	1.00	27.96	6	D	C
ATOM	10401	O	GLY D 165	-8.374	17.681	-49.975	1.00	29.23	8	D	O
ATOM	10402	N	GLY D 166	-8.910	15.919	-48.662	1.00	27.48	7	D	N
ATOM	10403	CA	GLY D 166	-10.028	15.469	-49.478	1.00	28.00	6	D	C
ATOM	10404	C	GLY D 166	-9.829	14.280	-50.378	1.00	28.44	6	D	C
ATOM	10405	O	GLY D 166	-10.765	13.587	-50.798	1.00	27.16	8	D	O
ATOM	10406	N	LYS D 167	-8.581	13.980	-50.756	1.00	30.30	7	D	N
ATOM	10407	CA	LYS D 167	-8.248	12.819	-51.587	1.00	30.11	6	D	C
ATOM	10408	C	LYS D 167	-8.204	11.541	-50.786	1.00	33.26	6	D	C
ATOM	10409	O	LYS D 167	-7.363	11.392	-49.875	1.00	33.49	8	D	O
ATOM	10410	CB	LYS D 167	-6.888	13.060	-52.262	1.00	31.72	6	D	C
ATOM	10411	CG	LYS D 167	-6.826	14.360	-53.033	1.00	31.23	6	D	C
ATOM	10412	CD	LYS D 167	-5.712	14.352	-54.091	1.00	32.19	6	D	C
ATOM	10413	CE	LYS D 167	-5.918	15.547	-55.024	1.00	32.33	6	D	C
ATOM	10414	NZ	LYS D 167	-6.581	15.139	-56.333	1.00	31.16	7	D	N
ATOM	10415	N	GLU D 168	-9.126	10.615	-51.028	1.00	32.89	7	D	N
ATOM	10416	CA	GLU D 168	-9.197	9.383	-50.274	1.00	33.56	6	D	C
ATOM	10417	C	GLU D 168	-8.237	8.394	-50.918	1.00	33.76	6	D	C
ATOM	10418	O	GLU D 168	-8.443	8.080	-52.096	1.00	33.01	8	D	O
ATOM	10419	CB	GLU D 168	-10.594	8.768	-50.171	1.00	35.30	6	D	C
ATOM	10420	CG	GLU D 168	-11.662	9.711	-49.611	1.00	37.20	6	D	C
ATOM	10421	CD	GLU D 168	-12.869	8.944	-49.135	1.00	37.61	6	D	C

133/188

ATOM	10422	OE1	GLU	D	168	-13.405	9.138	-48.025	1.00	36.69	8	D	O
ATOM	10423	OE2	GLU	D	168	-13.343	8.074	-49.907	1.00	38.98	8	D	O
ATOM	10424	N	ILE	D	169	-7.260	7.898	-50.189	1.00	31.08	7	D	N
ATOM	10425	CA	ILE	D	169	-6.252	7.036	-50.764	1.00	32.08	6	D	C
ATOM	10426	C	ILE	D	169	-6.738	5.588	-50.653	1.00	36.27	6	D	C
ATOM	10427	O	ILE	D	169	-6.724	5.013	-49.574	1.00	33.55	8	D	O
ATOM	10428	CB	ILE	D	169	-4.901	7.136	-50.034	1.00	30.00	6	D	C
ATOM	10429	CG1	ILE	D	169	-4.481	8.602	-49.934	1.00	28.79	6	D	C
ATOM	10430	CG2	ILE	D	169	-3.809	6.326	-50.735	1.00	29.39	6	D	C
ATOM	10431	CD1	ILE	D	169	-4.273	9.340	-51.202	1.00	28.11	6	D	C
ATOM	10432	N	ASP	D	170	-6.864	5.003	-51.817	1.00	40.78	7	D	N
ATOM	10433	CA	ASP	D	170	-7.278	3.642	-52.008	1.00	46.64	6	D	C
ATOM	10434	C	ASP	D	170	-6.111	2.766	-51.609	1.00	49.39	6	D	C
ATOM	10435	O	ASP	D	170	-5.134	2.682	-52.345	1.00	49.22	8	D	O
ATOM	10436	CB	ASP	D	170	-7.594	3.455	-53.510	1.00	49.95	6	D	C
ATOM	10437	CG	ASP	D	170	-8.703	2.434	-53.661	1.00	51.08	6	D	C
ATOM	10438	OD1	ASP	D	170	-9.577	2.422	-52.765	1.00	52.48	8	D	O
ATOM	10439	OD2	ASP	D	170	-8.665	1.686	-54.644	1.00	52.18	8	D	O
ATOM	10440	N	VAL	D	171	-6.219	2.217	-50.426	1.00	52.34	7	D	N
ATOM	10441	CA	VAL	D	171	-5.195	1.368	-49.831	1.00	56.64	6	D	C
ATOM	10442	C	VAL	D	171	-5.464	-0.061	-50.279	1.00	60.76	6	D	C
ATOM	10443	O	VAL	D	171	-6.628	-0.473	-50.297	1.00	61.93	8	D	O
ATOM	10444	CB	VAL	D	171	-5.273	1.523	-48.297	1.00	55.59	6	D	C
ATOM	10445	CG1	VAL	D	171	-4.708	0.337	-47.554	1.00	54.74	6	D	C
ATOM	10446	CG2	VAL	D	171	-4.589	2.816	-47.858	1.00	54.98	6	D	C
ATOM	10447	N	PRO	D	172	-4.429	-0.788	-50.664	1.00	63.14	7	D	N
ATOM	10448	CA	PRO	D	172	-4.560	-2.161	-51.100	1.00	65.44	6	D	C
ATOM	10449	C	PRO	D	172	-5.128	-2.993	-49.961	1.00	67.82	6	D	C
ATOM	10450	O	PRO	D	172	-5.050	-2.545	-48.814	1.00	68.51	8	D	O
ATOM	10451	CB	PRO	D	172	-3.157	-2.603	-51.457	1.00	64.82	6	D	C
ATOM	10452	CG	PRO	D	172	-2.364	-1.354	-51.554	1.00	64.66	6	D	C
ATOM	10453	CD	PRO	D	172	-3.022	-0.339	-50.661	1.00	63.66	6	D	C
ATOM	10454	N	GLU	D	173	-5.708	-4.132	-50.294	1.00	69.52	7	D	N
ATOM	10455	CA	GLU	D	173	-6.349	-4.970	-49.290	1.00	71.42	6	D	C
ATOM	10456	C	GLU	D	173	-5.285	-5.894	-48.705	1.00	69.52	6	D	C
ATOM	10457	O	GLU	D	173	-4.319	-6.276	-49.348	1.00	68.88	8	D	O
ATOM	10458	CB	GLU	D	173	-7.525	-5.784	-49.820	1.00	74.32	6	D	C
ATOM	10459	CG	GLU	D	173	-8.685	-5.028	-50.438	1.00	77.78	6	D	C
ATOM	10460	CD	GLU	D	173	-8.367	-4.389	-51.778	1.00	79.58	6	D	C
ATOM	10461	OE1	GLU	D	173	-8.700	-3.189	-51.939	1.00	81.24	8	D	O
ATOM	10462	OE2	GLU	D	173	-7.787	-5.059	-52.660	1.00	79.91	8	D	O
ATOM	10463	N	ASP	D	174	-5.462	-6.192	-47.439	1.00	67.87	7	D	N
ATOM	10464	CA	ASP	D	174	-4.627	-7.090	-46.674	1.00	65.95	6	D	C
ATOM	10465	C	ASP	D	174	-3.123	-6.943	-46.713	1.00	62.10	6	D	C
ATOM	10466	O	ASP	D	174	-2.334	-7.872	-46.914	1.00	61.40	8	D	O
ATOM	10467	CB	ASP	D	174	-5.099	-8.524	-46.993	1.00	68.83	6	D	C
ATOM	10468	CG	ASP	D	174	-6.574	-8.602	-46.576	1.00	71.03	6	D	C
ATOM	10469	OD1	ASP	D	174	-7.340	-9.085	-47.433	1.00	72.42	8	D	O
ATOM	10470	OD2	ASP	D	174	-6.935	-8.172	-45.461	1.00	72.73	8	D	O
ATOM	10471	N	LEU	D	175	-2.683	-5.736	-46.353	1.00	56.57	7	D	N
ATOM	10472	CA	LEU	D	175	-1.258	-5.446	-46.180	1.00	51.48	6	D	C
ATOM	10473	C	LEU	D	175	-0.914	-5.815	-44.737	1.00	47.02	6	D	C
ATOM	10474	O	LEU	D	175	-1.769	-5.696	-43.860	1.00	44.75	8	D	O
ATOM	10475	CB	LEU	D	175	-0.993	-3.964	-46.410	1.00	50.96	6	D	C
ATOM	10476	CG	LEU	D	175	-0.609	-3.442	-47.788	1.00	52.21	6	D	C
ATOM	10477	CD1	LEU	D	175	-1.292	-4.201	-48.922	1.00	52.04	6	D	C
ATOM	10478	CD2	LEU	D	175	-0.927	-1.954	-47.911	1.00	51.81	6	D	C
ATOM	10479	N	THR	D	176	0.285	-6.267	-44.473	1.00	42.90	7	D	N
ATOM	10480	CA	THR	D	176	0.719	-6.524	-43.097	1.00	39.89	6	D	C
ATOM	10481	C	THR	D	176	1.125	-5.182	-42.483	1.00	36.04	6	D	C
ATOM	10482	O	THR	D	176	1.278	-4.206	-43.224	1.00	34.63	8	D	O
ATOM	10483	CB	THR	D	176	1.886	-7.513	-43.065	1.00	40.48	6	D	C
ATOM	10484	OG1	THR	D	176	3.057	-6.912	-43.640	1.00	40.18	8	D	O
ATOM	10485	CG2	THR	D	176	1.502	-8.744	-43.876	1.00	42.19	6	D	C
ATOM	10486	N	VAL	D	177	1.344	-5.114	-41.182	1.00	34.54	7	D	N
ATOM	10487	CA	VAL	D	177	1.781	-3.847	-40.587	1.00	30.48	6	D	C
ATOM	10488	C	VAL	D	177	3.145	-3.519	-41.182	1.00	30.04	6	D	C
ATOM	10489	O	VAL	D	177	3.452	-2.370	-41.487	1.00	28.35	8	D	O
ATOM	10490	CB	VAL	D	177	1.794	-3.915	-39.060	1.00	29.85	6	D	C
ATOM	10491	CG1	VAL	D	177	2.378	-2.630	-38.482	1.00	26.57	6	D	C
ATOM	10492	CG2	VAL	D	177	0.373	-4.097	-38.485	1.00	30.47	6	D	C
ATOM	10493	N	ALA	D	178	3.970	-4.563	-41.375	1.00	30.15	7	D	N
ATOM	10494	CA	ALA	D	178	5.320	-4.348	-41.928	1.00	31.81	6	D	C
ATOM	10495	C	ALA	D	178	5.256	-3.791	-43.333	1.00	32.58	6	D	C
ATOM	10496	O	ALA	D	178	6.012	-2.876	-43.702	1.00	34.44	8	D	O
ATOM	10497	CB	ALA	D	178	6.083	-5.663	-41.874	1.00	33.92	6	D	C
ATOM	10498	N	GLU	D	179	4.231	-4.194	-44.081	1.00	33.31	7	D	N
ATOM	10499	CA	GLU	D	179	4.101	-3.741	-45.469	1.00	35.51	6	D	C
ATOM	10500	C	GLU	D	179	3.647	-2.290	-45.458	1.00	34.21	6	D	C

134/188

ATOM	10501	O	GLU D 179	4.078	-1.477	-46.283	1.00	35.13	8	D	O
ATOM	10502	CB	GLU D 179	3.114	-4.553	-46.299	1.00	38.04	6	D	C
ATOM	10503	CG	GLU D 179	3.680	-5.739	-47.035	1.00	39.51	6	D	C
ATOM	10504	CD	GLU D 179	2.702	-6.883	-47.240	1.00	41.58	6	D	C
ATOM	10505	OE1	GLU D 179	1.482	-6.794	-46.984	1.00	39.14	8	D	O
ATOM	10506	OE2	GLU D 179	3.236	-7.938	-47.670	1.00	43.14	8	D	O
ATOM	10507	N	ILE D 180	2.739	-2.037	-44.515	1.00	31.76	7	D	N
ATOM	10508	CA	ILE D 180	2.244	-0.650	-44.417	1.00	31.34	6	D	C
ATOM	10509	C	ILE D 180	3.408	0.257	-44.117	1.00	28.00	6	D	C
ATOM	10510	O	ILE D 180	3.561	1.295	-44.749	1.00	29.47	8	D	O
ATOM	10511	CB	ILE D 180	1.132	-0.571	-43.347	1.00	31.25	6	D	C
ATOM	10512	CG1	ILE D 180	-0.053	-1.395	-43.856	1.00	30.90	6	D	C
ATOM	10513	CG2	ILE D 180	0.723	0.872	-43.125	1.00	30.45	6	D	C
ATOM	10514	CD1	ILE D 180	-1.211	-1.377	-42.872	1.00	32.71	6	D	C
ATOM	10515	N	LYS D 181	4.209	-0.079	-43.122	1.00	27.95	7	D	N
ATOM	10516	CA	LYS D 181	5.345	0.796	-42.767	1.00	29.79	6	D	C
ATOM	10517	C	LYS D 181	6.367	0.941	-43.884	1.00	32.84	6	D	C
ATOM	10518	O	LYS D 181	6.854	2.049	-44.148	1.00	29.91	8	D	O
ATOM	10519	CB	LYS D 181	6.009	0.220	-41.520	1.00	30.37	6	D	C
ATOM	10520	CG	LYS D 181	7.276	0.972	-41.115	1.00	33.25	6	D	C
ATOM	10521	CD	LYS D 181	7.842	0.286	-39.873	1.00	34.20	6	D	C
ATOM	10522	CE	LYS D 181	9.084	0.952	-39.345	1.00	34.64	6	D	C
ATOM	10523	NZ	LYS D 181	8.984	2.430	-39.295	1.00	34.15	7	D	N
ATOM	10524	N	GLN D 182	6.656	-0.160	-44.599	1.00	34.14	7	D	N
ATOM	10525	CA	GLN D 182	7.642	-0.051	-45.691	1.00	37.75	6	D	C
ATOM	10526	C	GLN D 182	7.144	0.763	-46.866	1.00	37.20	6	D	C
ATOM	10527	O	GLN D 182	7.859	1.607	-47.441	1.00	39.39	8	D	O
ATOM	10528	CB	GLN D 182	8.043	-1.465	-46.108	1.00	42.71	6	D	C
ATOM	10529	CG	GLN D 182	9.019	-1.559	-47.261	1.00	50.12	6	D	C
ATOM	10530	CD	GLN D 182	10.069	-2.632	-46.992	1.00	55.17	6	D	C
ATOM	10531	OE1	GLN D 182	11.219	-2.518	-47.449	1.00	57.46	8	D	O
ATOM	10532	NE2	GLN D 182	9.669	-3.668	-46.248	1.00	57.15	7	D	N
ATOM	10533	N	ARG D 183	5.943	0.509	-47.352	1.00	35.47	7	D	N
ATOM	10534	CA	ARG D 183	5.428	1.301	-48.463	1.00	35.49	6	D	C
ATOM	10535	C	ARG D 183	5.366	2.778	-48.098	1.00	35.71	6	D	C
ATOM	10536	O	ARG D 183	5.853	3.682	-48.790	1.00	35.30	8	D	O
ATOM	10537	CB	ARG D 183	4.073	0.751	-48.888	1.00	35.66	6	D	C
ATOM	10538	CG	ARG D 183	4.229	-0.679	-49.398	1.00	37.59	6	D	C
ATOM	10539	CD	ARG D 183	3.060	-1.063	-50.293	1.00	41.60	6	D	C
ATOM	10540	NE	ARG D 183	3.143	-2.495	-50.568	1.00	44.94	7	D	N
ATOM	10541	CZ	ARG D 183	2.307	-3.260	-51.251	1.00	46.50	6	D	C
ATOM	10542	NH1	ARG D 183	1.206	-2.823	-51.827	1.00	45.86	7	D	N
ATOM	10543	NH2	ARG D 183	2.620	-4.555	-51.346	1.00	49.09	7	D	N
ATOM	10544	N	ALA D 184	4.763	3.027	-46.925	1.00	33.29	7	D	N
ATOM	10545	CA	ALA D 184	4.622	4.394	-46.460	1.00	33.21	6	D	C
ATOM	10546	C	ALA D 184	5.954	5.110	-46.392	1.00	33.23	6	D	C
ATOM	10547	O	ALA D 184	6.036	6.275	-46.752	1.00	32.19	8	D	O
ATOM	10548	CB	ALA D 184	3.919	4.400	-45.101	1.00	32.31	6	D	C
ATOM	10549	N	ALA D 185	7.010	4.427	-45.959	1.00	34.96	7	D	N
ATOM	10550	CA	ALA D 185	8.312	5.069	-45.787	1.00	36.31	6	D	C
ATOM	10551	C	ALA D 185	8.930	5.486	-47.115	1.00	38.37	6	D	C
ATOM	10552	O	ALA D 185	9.873	6.273	-47.151	1.00	38.78	8	D	O
ATOM	10553	CB	ALA D 185	9.241	4.093	-45.071	1.00	36.45	6	D	C
ATOM	10554	N	GLN D 186	8.423	4.923	-48.196	1.00	36.92	7	D	N
ATOM	10555	CA	GLN D 186	8.935	5.230	-49.522	1.00	39.01	6	D	C
ATOM	10556	C	GLN D 186	8.277	6.496	-50.052	1.00	36.96	6	D	C
ATOM	10557	O	GLN D 186	8.779	7.142	-50.964	1.00	38.67	8	D	O
ATOM	10558	CB	GLN D 186	8.730	4.018	-50.452	1.00	40.43	6	D	C
ATOM	10559	CG	GLN D 186	9.662	2.861	-50.169	1.00	44.37	6	D	C
ATOM	10560	CD	GLN D 186	9.271	1.484	-50.647	1.00	48.12	6	D	C
ATOM	10561	OE1	GLN D 186	8.582	1.207	-51.647	1.00	49.16	8	D	O
ATOM	10562	NE2	GLN D 186	9.737	0.462	-49.900	1.00	48.81	7	D	N
ATOM	10563	N	SER D 187	7.146	6.918	-49.481	1.00	31.95	7	D	N
ATOM	10564	CA	SER D 187	6.471	8.104	-49.978	1.00	28.76	6	D	C
ATOM	10565	C	SER D 187	6.843	9.390	-49.258	1.00	28.48	6	D	C
ATOM	10566	O	SER D 187	6.954	9.401	-48.028	1.00	29.18	8	D	O
ATOM	10567	CB	SER D 187	4.958	7.806	-49.808	1.00	26.92	6	D	C
ATOM	10568	OG	SER D 187	4.221	8.962	-50.057	1.00	21.11	8	D	O
ATOM	10569	N	GLU D 188	6.852	10.526	-49.930	1.00	27.96	7	D	N
ATOM	10570	CA	GLU D 188	7.079	11.812	-49.296	1.00	30.27	6	D	C
ATOM	10571	C	GLU D 188	5.772	12.357	-48.708	1.00	28.83	6	D	C
ATOM	10572	O	GLU D 188	5.824	13.418	-48.081	1.00	30.58	8	D	O
ATOM	10573	CB	GLU D 188	7.585	12.889	-50.258	1.00	34.51	6	D	C
ATOM	10574	CG	GLU D 188	8.893	12.564	-50.949	1.00	36.64	6	D	C
ATOM	10575	CD	GLU D 188	9.124	13.566	-52.070	1.00	39.07	6	D	C
ATOM	10576	OE1	GLU D 188	9.068	14.778	-51.793	1.00	39.00	8	D	O
ATOM	10577	OE2	GLU D 188	9.322	13.110	-53.224	1.00	40.00	8	D	O
ATOM	10578	N	VAL D 189	4.683	11.612	-48.871	1.00	25.73	7	D	N
ATOM	10579	CA	VAL D 189	3.404	12.027	-48.336	1.00	23.69	6	D	C

135/188

ATOM	10580	C	VAL	D	189	2.771	10.917	-47.518	1.00	22.42	6	D	C
ATOM	10581	O	VAL	D	189	1.590	10.974	-47.228	1.00	23.91	8	D	O
ATOM	10582	CB	VAL	D	189	2.428	12.596	-49.373	1.00	25.33	6	D	C
ATOM	10583	CG1	VAL	D	189	2.909	13.952	-49.843	1.00	24.49	6	D	C
ATOM	10584	CG2	VAL	D	189	2.170	11.675	-50.538	1.00	25.30	6	D	C
ATOM	10585	N	SER	D	190	3.533	9.926	-47.104	1.00	22.54	7	D	N
ATOM	10586	CA	SER	D	190	3.104	8.794	-46.305	1.00	25.54	6	D	C
ATOM	10587	C	SER	D	190	1.909	7.994	-46.794	1.00	26.59	6	D	C
ATOM	10588	O	SER	D	190	1.083	7.492	-45.996	1.00	24.17	8	D	O
ATOM	10589	CB	SER	D	190	2.787	9.233	-44.850	1.00	25.05	6	D	C
ATOM	10590	OG	SER	D	190	3.959	9.815	-44.308	1.00	24.04	8	D	O
ATOM	10591	N	ILE	D	191	1.850	7.833	-48.110	1.00	25.33	7	D	N
ATOM	10592	CA	ILE	D	191	0.746	7.064	-48.693	1.00	27.75	6	D	C
ATOM	10593	C	ILE	D	191	1.284	5.718	-49.127	1.00	29.07	6	D	C
ATOM	10594	O	ILE	D	191	2.423	5.614	-49.584	1.00	27.67	8	D	O
ATOM	10595	CB	ILE	D	191	0.001	7.781	-49.815	1.00	27.19	6	D	C
ATOM	10596	CG1	ILE	D	191	0.929	8.040	-51.026	1.00	30.15	6	D	C
ATOM	10597	CG2	ILE	D	191	-0.588	9.076	-49.285	1.00	26.57	6	D	C
ATOM	10598	CD1	ILE	D	191	0.138	8.530	-52.229	1.00	28.63	6	D	C
ATOM	10599	N	VAL	D	192	0.468	4.697	-48.938	1.00	29.92	7	D	N
ATOM	10600	CA	VAL	D	192	0.881	3.341	-49.266	1.00	31.11	6	D	C
ATOM	10601	C	VAL	D	192	0.728	3.049	-50.757	1.00	34.21	6	D	C
ATOM	10602	O	VAL	D	192	1.470	2.186	-51.201	1.00	35.75	8	D	O
ATOM	10603	CB	VAL	D	192	0.132	2.286	-48.458	1.00	28.16	6	D	C
ATOM	10604	CG1	VAL	D	192	0.316	2.534	-46.960	1.00	28.04	6	D	C
ATOM	10605	CG2	VAL	D	192	-1.339	2.254	-48.854	1.00	29.42	6	D	C
ATOM	10606	N	ASN	D	193	-0.119	3.748	-51.451	1.00	38.89	7	D	N
ATOM	10607	CA	ASN	D	193	-0.352	3.643	-52.891	1.00	43.59	6	D	C
ATOM	10608	C	ASN	D	193	0.071	4.972	-53.520	1.00	46.35	6	D	C
ATOM	10609	O	ASN	D	193	-0.648	5.953	-53.434	1.00	47.55	8	D	O
ATOM	10610	CB	ASN	D	193	-1.821	3.396	-53.214	1.00	42.77	6	D	C
ATOM	10611	CG	ASN	D	193	-2.318	3.730	-54.614	1.00	42.92	6	D	C
ATOM	10612	OD1	ASN	D	193	-1.564	3.983	-55.574	1.00	41.51	8	D	O
ATOM	10613	ND2	ASN	D	193	-3.633	3.758	-54.813	1.00	39.68	7	D	N
ATOM	10614	N	GLN	D	194	1.206	5.041	-54.164	1.00	52.02	7	D	N
ATOM	10615	CA	GLN	D	194	1.735	6.241	-54.765	1.00	57.76	6	D	C
ATOM	10616	C	GLN	D	194	1.299	6.722	-56.128	1.00	60.01	6	D	C
ATOM	10617	O	GLN	D	194	1.882	7.753	-56.515	1.00	60.96	8	D	O
ATOM	10618	CB	GLN	D	194	3.250	6.030	-54.893	1.00	59.78	6	D	C
ATOM	10619	CG	GLN	D	194	4.038	6.315	-53.620	1.00	62.70	6	D	C
ATOM	10620	CD	GLN	D	194	5.496	6.052	-53.974	1.00	64.73	6	D	C
ATOM	10621	OE1	GLN	D	194	6.211	6.953	-54.419	1.00	65.59	8	D	O
ATOM	10622	NE2	GLN	D	194	5.882	4.792	-53.785	1.00	65.75	7	D	N
ATOM	10623	N	GLU	D	195	0.437	6.037	-56.873	1.00	60.61	7	D	N
ATOM	10624	CA	GLU	D	195	0.090	6.589	-58.198	1.00	59.91	6	D	C
ATOM	10625	C	GLU	D	195	-0.520	7.965	-57.973	1.00	57.53	6	D	C
ATOM	10626	O	GLU	D	195	-0.932	8.713	-58.845	1.00	58.00	8	D	O
ATOM	10627	CB	GLU	D	195	-0.904	5.664	-58.884	1.00	62.74	6	D	C
ATOM	10628	CG	GLU	D	195	-2.302	5.795	-58.292	1.00	64.62	6	D	C
ATOM	10629	CD	GLU	D	195	-3.023	4.466	-58.264	1.00	66.54	6	D	C
ATOM	10630	OE1	GLU	D	195	-2.403	3.425	-58.568	1.00	67.58	8	D	O
ATOM	10631	OE2	GLU	D	195	-4.228	4.463	-57.921	1.00	66.72	8	D	O
ATOM	10632	N	ARG	D	196	-0.694	8.189	-56.655	1.00	53.49	7	D	N
ATOM	10633	CA	ARG	D	196	-1.268	9.470	-56.274	1.00	48.46	6	D	C
ATOM	10634	C	ARG	D	196	-0.179	10.407	-55.774	1.00	44.70	6	D	C
ATOM	10635	O	ARG	D	196	-0.475	11.550	-55.527	1.00	42.34	8	D	O
ATOM	10636	CB	ARG	D	196	-2.345	9.241	-55.214	1.00	48.66	6	D	C
ATOM	10637	CG	ARG	D	196	-3.538	10.107	-55.653	1.00	48.57	6	D	C
ATOM	10638	CD	ARG	D	196	-4.445	9.188	-56.491	1.00	45.02	6	D	C
ATOM	10639	NE	ARG	D	196	-5.594	8.868	-55.715	1.00	40.87	7	D	N
ATOM	10640	CZ	ARG	D	196	-6.630	9.566	-55.299	1.00	40.34	6	D	C
ATOM	10641	NH1	ARG	D	196	-6.883	10.847	-55.530	1.00	37.74	7	D	N
ATOM	10642	NH2	ARG	D	196	-7.481	8.809	-54.589	1.00	38.60	7	D	N
ATOM	10643	N	GLU	D	197	1.039	9.876	-55.641	1.00	43.98	7	D	N
ATOM	10644	CA	GLU	D	197	2.128	10.682	-55.111	1.00	41.56	6	D	C
ATOM	10645	C	GLU	D	197	2.231	12.033	-55.786	1.00	40.90	6	D	C
ATOM	10646	O	GLU	D	197	2.184	13.077	-55.120	1.00	40.85	8	D	O
ATOM	10647	CB	GLU	D	197	3.470	9.952	-55.186	1.00	42.40	6	D	C
ATOM	10648	CG	GLU	D	197	4.571	10.753	-54.487	1.00	41.92	6	D	C
ATOM	10649	CD	GLU	D	197	4.965	10.078	-53.188	1.00	42.52	6	D	C
ATOM	10650	OE1	GLU	D	197	4.179	9.243	-52.687	1.00	41.31	8	D	O
ATOM	10651	OE2	GLU	D	197	6.090	10.328	-52.714	1.00	42.94	8	D	O
ATOM	10652	N	GLN	D	198	2.320	12.028	-57.136	1.00	37.58	7	D	N
ATOM	10653	CA	GLN	D	198	2.525	13.353	-57.780	1.00	35.55	6	D	C
ATOM	10654	C	GLN	D	198	1.289	14.195	-57.743	1.00	32.69	6	D	C
ATOM	10655	O	GLN	D	198	1.265	15.421	-57.542	1.00	30.82	8	D	O
ATOM	10656	CB	GLN	D	198	3.084	13.170	-59.201	1.00	35.10	6	D	C
ATOM	10657	CG	GLN	D	198	4.432	12.514	-59.171	1.00	35.84	6	D	C
ATOM	10658	CD	GLN	D	198	5.460	13.312	-58.396	1.00	36.40	6	D	C

ATOM	10659	OE1	GLN	D	198	5.427	14.544	-58.403	1.00	35.64	8	D	O
ATOM	10660	NE2	GLN	D	198	6.381	12.606	-57.741	1.00	38.80	7	D	N
ATOM	10661	N	GLU	D	199	0.144	13.516	-57.866	1.00	33.83	7	D	N
ATOM	10662	CA	GLU	D	199	-1.130	14.266	-57.758	1.00	33.77	6	D	C
ATOM	10663	C	GLU	D	199	-1.253	14.967	-56.403	1.00	31.60	6	D	C
ATOM	10664	O	GLU	D	199	-1.636	16.131	-56.256	1.00	27.88	8	D	O
ATOM	10665	CB	GLU	D	199	-2.268	13.269	-57.993	1.00	35.86	6	D	C
ATOM	10666	CG	GLU	D	199	-3.647	13.846	-57.757	1.00	36.99	6	D	C
ATOM	10667	CD	GLU	D	199	-4.708	12.786	-57.558	1.00	38.14	6	D	C
ATOM	10668	OE1	GLU	D	199	-5.777	13.064	-57.026	1.00	37.87	8	D	O
ATOM	10669	OE2	GLU	D	199	-4.584	11.596	-57.907	1.00	41.35	8	D	O
ATOM	10670	N	ILE	D	200	-0.970	14.217	-55.327	1.00	31.54	7	D	N
ATOM	10671	CA	ILE	D	200	-1.073	14.975	-54.011	1.00	31.73	6	D	C
ATOM	10672	C	ILE	D	200	-0.096	16.138	-53.903	1.00	30.03	6	D	C
ATOM	10673	O	ILE	D	200	-0.396	17.244	-53.449	1.00	26.04	8	D	O
ATOM	10674	CB	ILE	D	200	-0.954	13.985	-52.864	1.00	32.11	6	D	C
ATOM	10675	CG1	ILE	D	200	-2.310	13.232	-52.736	1.00	32.05	6	D	C
ATOM	10676	CG2	ILE	D	200	-0.603	14.663	-51.544	1.00	30.35	6	D	C
ATOM	10677	CD1	ILE	D	200	-2.049	11.769	-52.463	1.00	32.95	6	D	C
ATOM	10678	N	LYS	D	201	1.153	15.943	-54.343	1.00	30.45	7	D	N
ATOM	10679	CA	LYS	D	201	2.139	17.034	-54.283	1.00	29.42	6	D	C
ATOM	10680	C	LYS	D	201	1.698	18.272	-55.025	1.00	31.50	6	D	C
ATOM	10681	O	LYS	D	201	1.842	19.425	-54.558	1.00	31.30	8	D	O
ATOM	10682	CB	LYS	D	201	3.497	16.473	-54.728	1.00	28.32	6	D	C
ATOM	10683	CG	LYS	D	201	4.027	15.414	-53.769	1.00	27.09	6	D	C
ATOM	10684	CD	LYS	D	201	5.326	14.775	-54.220	1.00	31.23	6	D	C
ATOM	10685	CE	LYS	D	201	6.392	15.841	-54.469	1.00	32.11	6	D	C
ATOM	10686	NZ	LYS	D	201	7.773	15.277	-54.511	1.00	34.14	7	D	N
ATOM	10687	N	ASP	D	202	1.243	18.095	-56.270	1.00	33.62	7	D	N
ATOM	10688	CA	ASP	D	202	0.744	19.202	-57.066	1.00	36.56	6	D	C
ATOM	10689	C	ASP	D	202	-0.274	20.048	-56.303	1.00	34.49	6	D	C
ATOM	10690	O	ASP	D	202	-0.353	21.262	-56.239	1.00	34.70	8	D	O
ATOM	10691	CB	ASP	D	202	-0.066	18.626	-58.256	1.00	40.30	6	D	C
ATOM	10692	CG	ASP	D	202	-0.589	19.753	-59.131	1.00	42.53	6	D	C
ATOM	10693	OD1	ASP	D	202	0.193	20.583	-59.636	1.00	42.83	8	D	O
ATOM	10694	OD2	ASP	D	202	-1.823	19.861	-59.290	1.00	44.78	8	D	O
ATOM	10695	N	TYR	D	203	-1.153	19.257	-55.707	1.00	35.94	7	D	N
ATOM	10696	CA	TYR	D	203	-2.235	19.835	-54.885	1.00	37.25	6	D	C
ATOM	10697	C	TYR	D	203	-1.667	20.605	-53.715	1.00	34.45	6	D	C
ATOM	10698	O	TYR	D	203	-2.183	21.693	-53.510	1.00	33.14	8	D	O
ATOM	10699	CB	TYR	D	203	-3.103	18.698	-54.410	1.00	41.17	6	D	C
ATOM	10700	CG	TYR	D	203	-4.309	19.018	-53.574	1.00	46.60	6	D	C
ATOM	10701	CD1	TYR	D	203	-4.728	18.044	-52.666	1.00	48.08	6	D	C
ATOM	10702	CD2	TYR	D	203	-5.013	20.207	-53.655	1.00	48.11	6	D	C
ATOM	10703	CE1	TYR	D	203	-5.833	18.247	-51.861	1.00	49.69	6	D	C
ATOM	10704	CE2	TYR	D	203	-6.116	20.417	-52.857	1.00	50.96	6	D	C
ATOM	10705	CZ	TYR	D	203	-6.513	19.437	-51.969	1.00	50.85	6	D	C
ATOM	10706	OH	TYR	D	203	-7.615	19.656	-51.178	1.00	51.92	8	D	O
ATOM	10707	N	ILE	D	204	-0.685	20.010	-53.012	1.00	31.47	7	D	N
ATOM	10708	CA	ILE	D	204	-0.100	20.786	-51.897	1.00	29.86	6	D	C
ATOM	10709	C	ILE	D	204	0.472	22.072	-52.452	1.00	32.73	6	D	C
ATOM	10710	O	ILE	D	204	0.470	23.146	-51.845	1.00	28.05	8	D	O
ATOM	10711	CB	ILE	D	204	0.936	19.919	-51.143	1.00	29.80	6	D	C
ATOM	10712	CG1	ILE	D	204	0.230	18.779	-50.402	1.00	28.57	6	D	C
ATOM	10713	CG2	ILE	D	204	1.802	20.756	-50.210	1.00	27.68	6	D	C
ATOM	10714	CD1	ILE	D	204	1.030	17.571	-49.975	1.00	26.88	6	D	C
ATOM	10715	N	ASP	D	205	1.065	22.006	-53.666	1.00	36.33	7	D	N
ATOM	10716	CA	ASP	D	205	1.608	23.293	-54.170	1.00	40.37	6	D	C
ATOM	10717	C	ASP	D	205	0.488	24.209	-54.640	1.00	40.90	6	D	C
ATOM	10718	O	ASP	D	205	0.635	25.400	-54.450	1.00	40.51	8	D	O
ATOM	10719	CB	ASP	D	205	2.682	23.131	-55.226	1.00	44.07	6	D	C
ATOM	10720	CG	ASP	D	205	3.905	22.406	-54.696	1.00	46.01	6	D	C
ATOM	10721	OD1	ASP	D	205	4.496	22.789	-53.675	1.00	47.31	8	D	O
ATOM	10722	OD2	ASP	D	205	4.234	21.397	-55.342	1.00	47.42	8	D	O
ATOM	10723	N	GLN	D	206	-0.613	23.696	-55.178	1.00	43.70	7	D	N
ATOM	10724	CA	GLN	D	206	-1.742	24.587	-55.492	1.00	45.87	6	D	C
ATOM	10725	C	GLN	D	206	-2.129	25.331	-54.209	1.00	45.34	6	D	C
ATOM	10726	O	GLN	D	206	-2.018	26.550	-54.085	1.00	44.82	8	D	O
ATOM	10727	CB	GLN	D	206	-2.923	23.743	-55.954	1.00	48.17	6	D	C
ATOM	10728	CG	GLN	D	206	-3.767	24.331	-57.073	1.00	51.39	6	D	C
ATOM	10729	CD	GLN	D	206	-3.500	23.513	-58.329	1.00	52.69	6	D	C
ATOM	10730	OE1	GLN	D	206	-3.841	22.332	-58.275	1.00	53.42	8	D	O
ATOM	10731	NE2	GLN	D	206	-2.914	24.074	-59.370	1.00	53.97	7	D	N
ATOM	10732	N	ILE	D	207	-2.441	24.494	-53.201	1.00	41.90	7	D	N
ATOM	10733	CA	ILE	D	207	-2.862	25.031	-51.899	1.00	39.93	6	D	C
ATOM	10734	C	ILE	D	207	-1.844	26.045	-51.427	1.00	39.53	6	D	C
ATOM	10735	O	ILE	D	207	-2.139	27.157	-50.996	1.00	36.62	8	D	O
ATOM	10736	CB	ILE	D	207	-3.039	23.866	-50.897	1.00	38.11	6	D	C
ATOM	10737	CG1	ILE	D	207	-4.199	22.976	-51.342	1.00	35.99	6	D	C

137/188

ATOM	10738	CG2	ILE	D	207	-3.174	24.325	-49.459	1.00	37.34	6	D	C
ATOM	10739	CD1	ILE	D	207	-5.566	23.611	-51.201	1.00	37.11	6	D	C
ATOM	10740	N	LYS	D	208	-0.570	25.642	-51.556	1.00	41.37	7	D	N
ATOM	10741	CA	LYS	D	208	0.481	26.574	-51.161	1.00	44.94	6	D	C
ATOM	10742	C	LYS	D	208	0.434	27.853	-51.997	1.00	46.72	6	D	C
ATOM	10743	O	LYS	D	208	0.590	28.944	-51.450	1.00	46.56	8	D	O
ATOM	10744	CB	LYS	D	208	1.861	25.932	-51.291	1.00	44.86	6	D	C
ATOM	10745	CG	LYS	D	208	2.900	26.891	-50.712	1.00	46.05	6	D	C
ATOM	10746	CD	LYS	D	208	4.297	26.463	-51.150	1.00	46.75	6	D	C
ATOM	10747	CE	LYS	D	208	5.365	27.400	-50.616	1.00	46.60	6	D	C
ATOM	10748	NZ	LYS	D	208	6.728	26.911	-50.974	1.00	46.29	7	D	N
ATOM	10749	N	ARG	D	209	0.341	27.716	-53.327	1.00	50.03	7	D	N
ATOM	10750	CA	ARG	D	209	0.341	28.999	-54.066	1.00	54.57	6	D	C
ATOM	10751	C	ARG	D	209	-0.975	29.687	-53.687	1.00	54.75	6	D	C
ATOM	10752	O	ARG	D	209	-0.939	30.823	-53.211	1.00	53.84	8	D	O
ATOM	10753	CB	ARG	D	209	0.596	28.901	-55.528	1.00	57.60	6	D	C
ATOM	10754	CG	ARG	D	209	-0.082	27.788	-56.296	1.00	61.28	6	D	C
ATOM	10755	CD	ARG	D	209	0.684	27.558	-57.612	1.00	63.96	6	D	C
ATOM	10756	NE	ARG	D	209	0.280	26.266	-58.154	1.00	66.07	7	D	N
ATOM	10757	CZ	ARG	D	209	1.091	25.262	-58.471	1.00	67.26	6	D	C
ATOM	10758	NH1	ARG	D	209	2.405	25.365	-58.300	1.00	68.08	7	D	N
ATOM	10759	NH2	ARG	D	209	0.532	24.149	-58.946	1.00	67.08	7	D	N
ATOM	10760	N	ASP	D	210	-2.060	28.922	-53.793	1.00	53.43	7	D	N
ATOM	10761	CA	ASP	D	210	-3.354	29.471	-53.419	1.00	53.28	6	D	C
ATOM	10762	C	ASP	D	210	-3.363	30.176	-52.076	1.00	49.87	6	D	C
ATOM	10763	O	ASP	D	210	-4.406	30.747	-51.763	1.00	50.10	8	D	O
ATOM	10764	CB	ASP	D	210	-4.438	28.386	-53.408	1.00	55.76	6	D	C
ATOM	10765	CG	ASP	D	210	-5.040	28.247	-54.788	1.00	58.12	6	D	C
ATOM	10766	OD1	ASP	D	210	-5.800	27.283	-55.022	1.00	59.09	8	D	O
ATOM	10767	OD2	ASP	D	210	-4.761	29.128	-55.625	1.00	59.48	8	D	O
ATOM	10768	N	GLY	D	211	-2.334	30.051	-51.262	1.00	46.71	7	D	N
ATOM	10769	CA	GLY	D	211	-2.227	30.653	-49.958	1.00	41.37	6	D	C
ATOM	10770	C	GLY	D	211	-3.148	30.049	-48.891	1.00	38.44	6	D	C
ATOM	10771	O	GLY	D	211	-3.463	30.682	-47.898	1.00	36.37	8	D	O
ATOM	10772	N	ASP	D	212	-3.559	28.815	-49.048	1.00	36.00	7	D	N
ATOM	10773	CA	ASP	D	212	-4.461	28.137	-48.127	1.00	35.28	6	D	C
ATOM	10774	C	ASP	D	212	-3.760	26.977	-47.424	1.00	33.26	6	D	C
ATOM	10775	O	ASP	D	212	-2.529	26.893	-47.549	1.00	33.62	8	D	O
ATOM	10776	CB	ASP	D	212	-5.685	27.678	-48.935	1.00	33.16	6	D	C
ATOM	10777	CG	ASP	D	212	-6.955	27.751	-48.075	1.00	32.74	6	D	C
ATOM	10778	OD1	ASP	D	212	-8.017	27.978	-48.708	1.00	29.19	8	D	O
ATOM	10779	OD2	ASP	D	212	-6.826	27.575	-46.835	1.00	31.07	8	D	O
ATOM	10780	N	THR	D	213	-4.466	26.130	-46.698	1.00	31.18	7	D	N
ATOM	10781	CA	THR	D	213	-3.847	24.971	-46.016	1.00	28.69	6	D	C
ATOM	10782	C	THR	D	213	-4.767	23.788	-46.122	1.00	29.57	6	D	C
ATOM	10783	O	THR	D	213	-5.977	23.951	-46.404	1.00	29.52	8	D	O
ATOM	10784	CB	THR	D	213	-3.619	25.233	-44.514	1.00	28.12	6	D	C
ATOM	10785	OG1	THR	D	213	-4.881	25.516	-43.879	1.00	26.94	8	D	O
ATOM	10786	CG2	THR	D	213	-2.721	26.441	-44.289	1.00	25.71	6	D	C
ATOM	10787	N	ILE	D	214	-4.250	22.579	-45.964	1.00	27.78	7	D	N
ATOM	10788	CA	ILE	D	214	-5.106	21.401	-45.949	1.00	25.54	6	D	C
ATOM	10789	C	ILE	D	214	-4.622	20.511	-44.792	1.00	25.61	6	D	C
ATOM	10790	O	ILE	D	214	-3.539	20.773	-44.281	1.00	23.45	8	D	O
ATOM	10791	CB	ILE	D	214	-5.058	20.576	-47.236	1.00	25.81	6	D	C
ATOM	10792	CG1	ILE	D	214	-3.597	20.296	-47.628	1.00	24.89	6	D	C
ATOM	10793	CG2	ILE	D	214	-5.750	21.396	-48.346	1.00	27.53	6	D	C
ATOM	10794	CD1	ILE	D	214	-3.486	19.284	-48.768	1.00	24.57	6	D	C
ATOM	10795	N	GLY	D	215	-5.408	19.526	-44.465	1.00	23.83	7	D	N
ATOM	10796	CA	GLY	D	215	-5.181	18.568	-43.394	1.00	23.30	6	D	C
ATOM	10797	C	GLY	D	215	-5.577	17.214	-43.996	1.00	23.64	6	D	C
ATOM	10798	O	GLY	D	215	-5.360	17.033	-45.218	1.00	20.99	8	D	O
ATOM	10799	N	GLY	D	216	-6.174	16.348	-43.201	1.00	22.64	7	D	N
ATOM	10800	CA	GLY	D	216	-6.588	15.052	-43.719	1.00	23.13	6	D	C
ATOM	10801	C	GLY	D	216	-6.778	14.046	-42.596	1.00	23.88	6	D	C
ATOM	10802	O	GLY	D	216	-7.080	14.392	-41.433	1.00	23.57	8	D	O
ATOM	10803	N	VAL	D	217	-6.632	12.800	-42.976	1.00	23.10	7	D	N
ATOM	10804	CA	VAL	D	217	-6.898	11.689	-42.074	1.00	22.75	6	D	C
ATOM	10805	C	VAL	D	217	-5.685	10.769	-42.125	1.00	23.01	6	D	C
ATOM	10806	O	VAL	D	217	-5.194	10.449	-43.199	1.00	22.43	8	D	O
ATOM	10807	CB	VAL	D	217	-8.214	10.977	-42.404	1.00	23.68	6	D	C
ATOM	10808	CG1	VAL	D	217	-8.428	9.822	-41.440	1.00	23.39	6	D	C
ATOM	10809	CG2	VAL	D	217	-9.403	11.945	-42.353	1.00	22.10	6	D	C
ATOM	10810	N	VAL	D	218	-5.183	10.454	-40.929	1.00	20.31	7	D	N
ATOM	10811	CA	VAL	D	218	-4.027	9.580	-40.775	1.00	20.39	6	D	C
ATOM	10812	C	VAL	D	218	-4.467	8.320	-40.029	1.00	21.36	6	D	C
ATOM	10813	O	VAL	D	218	-5.324	8.314	-39.132	1.00	21.63	8	D	O
ATOM	10814	CB	VAL	D	218	-2.881	10.404	-40.170	1.00	20.36	6	D	C
ATOM	10815	CG1AVAL	D	218	-2.186	9.775	-38.971	0.50	21.29	6	D	C	
ATOM	10816	CG1BVAL	D	218	-2.446	11.484	-41.136	0.50	19.38	6	D	C	

138/188

ATOM	10817	CG2AVAL	D	218	-1.887	10.782	-41.259	0.50	19.22	6	D	C	
ATOM	10818	CG2BVAL	D	218	-3.244	10.917	-38.793	0.50	18.45	6	D	C	
ATOM	10819	N	GLU	D	219	-3.925	7.204	-40.461	1.00	20.84	7	D	N
ATOM	10820	CA	GLU	D	219	-4.238	5.892	-39.877	1.00	22.90	6	D	C
ATOM	10821	C	GLU	D	219	-3.008	5.261	-39.220	1.00	20.97	6	D	C
ATOM	10822	O	GLU	D	219	-1.913	5.270	-39.792	1.00	19.94	8	D	O
ATOM	10823	CB	GLU	D	219	-4.737	4.954	-40.962	1.00	22.94	6	D	C
ATOM	10824	CG	GLU	D	219	-5.051	3.559	-40.503	1.00	24.74	6	D	C
ATOM	10825	CD	GLU	D	219	-5.799	2.707	-41.525	1.00	25.68	6	D	C
ATOM	10826	OE1	GLU	D	219	-5.205	1.697	-41.896	1.00	26.12	8	D	O
ATOM	10827	OE2	GLU	D	219	-6.992	2.891	-41.850	1.00	27.67	8	D	O
ATOM	10828	N	THR	D	220	-3.201	4.735	-38.031	1.00	21.36	7	D	N
ATOM	10829	CA	THR	D	220	-2.148	4.056	-37.277	1.00	20.39	6	D	C
ATOM	10830	C	THR	D	220	-2.570	2.599	-37.124	1.00	20.84	6	D	C
ATOM	10831	O	THR	D	220	-3.723	2.357	-36.726	1.00	19.39	8	D	O
ATOM	10832	CB	THR	D	220	-1.833	4.680	-35.910	1.00	20.84	6	D	C
ATOM	10833	OG1	THR	D	220	-1.346	6.028	-36.065	1.00	19.77	8	D	O
ATOM	10834	CG2	THR	D	220	-0.793	3.935	-35.107	1.00	19.86	6	D	C
ATOM	10835	N	VAL	D	221	-1.655	1.690	-37.418	1.00	19.66	7	D	N
ATOM	10836	CA	VAL	D	221	-1.999	0.267	-37.221	1.00	21.74	6	D	C
ATOM	10837	C	VAL	D	221	-1.007	-0.396	-36.277	1.00	20.41	6	D	C
ATOM	10838	O	VAL	D	221	0.160	-0.063	-36.408	1.00	18.44	8	D	O
ATOM	10839	CB	VAL	D	221	-2.055	-0.433	-38.569	1.00	24.40	6	D	C
ATOM	10840	CG1	VAL	D	221	-2.407	-1.911	-38.453	1.00	28.65	6	D	C
ATOM	10841	CG2	VAL	D	221	-3.145	0.237	-39.427	1.00	26.57	6	D	C
ATOM	10842	N	VAL	D	222	-1.460	-1.346	-35.436	1.00	18.85	7	D	N
ATOM	10843	CA	VAL	D	222	-0.533	-2.008	-34.534	1.00	19.46	6	D	C
ATOM	10844	C	VAL	D	222	-0.725	-3.524	-34.652	1.00	20.75	6	D	C
ATOM	10845	O	VAL	D	222	-1.855	-3.962	-34.589	1.00	21.45	8	D	O
ATOM	10846	CB	VAL	D	222	-0.746	-1.577	-33.067	1.00	19.74	6	D	C
ATOM	10847	CG1	VAL	D	222	0.390	-2.053	-32.172	1.00	17.52	6	D	C
ATOM	10848	CG2	VAL	D	222	-0.898	-0.048	-32.921	1.00	18.04	6	D	C
ATOM	10849	N	GLY	D	223	0.318	-4.298	-34.891	1.00	20.87	7	D	N
ATOM	10850	CA	GLY	D	223	0.153	-5.759	-34.986	1.00	23.81	6	D	C
ATOM	10851	C	GLY	D	223	0.803	-6.491	-33.824	1.00	24.11	6	D	C
ATOM	10852	O	GLY	D	223	1.683	-6.026	-33.101	1.00	25.58	8	D	O
ATOM	10853	N	GLY	D	224	0.445	-7.755	-33.666	1.00	26.48	7	D	N
ATOM	10854	CA	GLY	D	224	1.022	-8.617	-32.645	1.00	23.28	6	D	C
ATOM	10855	C	GLY	D	224	0.465	-8.187	-31.288	1.00	22.56	6	D	C
ATOM	10856	O	GLY	D	224	1.106	-8.586	-30.314	1.00	21.39	8	D	O
ATOM	10857	N	VAL	D	225	-0.698	-7.569	-31.152	1.00	20.34	7	D	N
ATOM	10858	CA	VAL	D	225	-1.129	-7.123	-29.807	1.00	23.16	6	D	C
ATOM	10859	C	VAL	D	225	-1.616	-8.235	-28.887	1.00	21.80	6	D	C
ATOM	10860	O	VAL	D	225	-2.471	-9.013	-29.314	1.00	22.47	8	D	O
ATOM	10861	CB	VAL	D	225	-2.302	-6.124	-30.010	1.00	24.04	6	D	C
ATOM	10862	CG1	VAL	D	225	-2.699	-5.438	-28.718	1.00	24.06	6	D	C
ATOM	10863	CG2	VAL	D	225	-1.897	-5.071	-31.050	1.00	26.64	6	D	C
ATOM	10864	N	PRO	D	226	-1.255	-8.278	-27.629	1.00	21.92	7	D	N
ATOM	10865	CA	PRO	D	226	-1.734	-9.245	-26.653	1.00	22.99	6	D	C
ATOM	10866	C	PRO	D	226	-3.232	-9.042	-26.444	1.00	22.76	6	D	C
ATOM	10867	O	PRO	D	226	-3.759	-7.931	-26.651	1.00	23.10	8	D	O
ATOM	10868	CB	PRO	D	226	-0.958	-8.939	-25.351	1.00	23.00	6	D	C
ATOM	10869	CG	PRO	D	226	0.307	-8.302	-25.889	1.00	22.85	6	D	C
ATOM	10870	CD	PRO	D	226	-0.165	-7.432	-27.035	1.00	22.34	6	D	C
ATOM	10871	N	VAL	D	227	-3.919	-10.106	-26.109	1.00	19.70	7	D	N
ATOM	10872	CA	VAL	D	227	-5.376	-10.072	-25.930	1.00	19.78	6	D	C
ATOM	10873	C	VAL	D	227	-5.752	-9.670	-24.517	1.00	18.16	6	D	C
ATOM	10874	O	VAL	D	227	-5.063	-10.078	-23.569	1.00	17.71	8	D	O
ATOM	10875	CB	VAL	D	227	-5.874	-11.493	-26.265	1.00	20.26	6	D	C
ATOM	10876	CG1	VAL	D	227	-7.361	-11.615	-25.957	1.00	18.84	6	D	C
ATOM	10877	CG2	VAL	D	227	-5.598	-11.782	-27.756	1.00	18.20	6	D	C
ATOM	10878	N	GLY	D	228	-6.730	-8.774	-24.324	1.00	19.30	7	D	N
ATOM	10879	CA	GLY	D	228	-7.148	-8.414	-22.981	1.00	19.00	6	D	C
ATOM	10880	C	GLY	D	228	-6.447	-7.250	-22.296	1.00	20.25	6	D	C
ATOM	10881	O	GLY	D	228	-6.472	-7.089	-21.067	1.00	19.45	8	D	O
ATOM	10882	N	LEU	D	229	-5.876	-6.372	-23.113	1.00	19.78	7	D	N
ATOM	10883	CA	LEU	D	229	-5.338	-5.087	-22.636	1.00	18.77	6	D	C
ATOM	10884	C	LEU	D	229	-6.523	-4.128	-22.611	1.00	20.68	6	D	C
ATOM	10885	O	LEU	D	229	-7.194	-4.031	-23.655	1.00	16.68	8	D	O
ATOM	10886	CB	LEU	D	229	-4.296	-4.577	-23.621	1.00	18.29	6	D	C
ATOM	10887	CG	LEU	D	229	-2.935	-5.345	-23.539	1.00	18.61	6	D	C
ATOM	10888	CD1	LEU	D	229	-2.106	-4.964	-24.750	1.00	17.69	6	D	C
ATOM	10889	CD2	LEU	D	229	-2.254	-4.814	-22.264	1.00	15.60	6	D	C
ATOM	10890	N	GLY	D	230	-6.726	-3.452	-21.476	1.00	20.10	7	D	N
ATOM	10891	CA	GLY	D	230	-7.882	-2.593	-21.266	1.00	17.24	6	D	C
ATOM	10892	C	GLY	D	230	-8.935	-3.383	-20.527	1.00	17.01	6	D	C
ATOM	10893	O	GLY	D	230	-8.780	-4.596	-20.319	1.00	17.47	8	D	O
ATOM	10894	N	SER	D	231	-10.058	-2.751	-20.148	1.00	17.11	7	D	N
ATOM	10895	CA	SER	D	231	-11.104	-3.495	-19.456	1.00	17.50	6	D	C

139/188

ATOM	10896	C	SER	D	231	-12.443	-2.804	-19.615	1.00	17.85	6	D	C
ATOM	10897	O	SER	D	231	-12.437	-1.573	-19.707	1.00	16.45	8	D	O
ATOM	10898	CB	SER	D	231	-10.790	-3.621	-17.941	1.00	17.75	6	D	C
ATOM	10899	OG	SER	D	231	-11.831	-4.422	-17.357	1.00	19.22	8	D	O
ATOM	10900	N	TYR	D	232	-13.536	-3.556	-19.623	1.00	17.98	7	D	N
ATOM	10901	CA	TYR	D	232	-14.864	-2.988	-19.670	1.00	18.51	6	D	C
ATOM	10902	C	TYR	D	232	-15.424	-2.719	-18.275	1.00	18.59	6	D	C
ATOM	10903	O	TYR	D	232	-16.536	-2.172	-18.232	1.00	18.54	8	D	O
ATOM	10904	CB	TYR	D	232	-15.879	-3.972	-20.315	1.00	21.49	6	D	C
ATOM	10905	CG	TYR	D	232	-15.881	-5.286	-19.554	1.00	21.83	6	D	C
ATOM	10906	CD1	TYR	D	232	-16.644	-5.535	-18.444	1.00	20.91	6	D	C
ATOM	10907	CD2	TYR	D	232	-15.019	-6.294	-19.999	1.00	22.59	6	D	C
ATOM	10908	CE1	TYR	D	232	-16.586	-6.764	-17.810	1.00	21.77	6	D	C
ATOM	10909	CE2	TYR	D	232	-14.957	-7.527	-19.356	1.00	21.31	6	D	C
ATOM	10910	CZ	TYR	D	232	-15.737	-7.745	-18.262	1.00	21.76	6	D	C
ATOM	10911	OH	TYR	D	232	-15.633	-8.960	-17.580	1.00	23.91	8	D	O
ATOM	10912	N	VAL	D	233	-14.749	-3.098	-17.182	1.00	18.33	7	D	N
ATOM	10913	CA	VAL	D	233	-15.414	-3.011	-15.863	1.00	17.54	6	D	C
ATOM	10914	C	VAL	D	233	-15.656	-1.608	-15.384	1.00	18.43	6	D	C
ATOM	10915	O	VAL	D	233	-16.457	-1.450	-14.466	1.00	18.32	8	D	O
ATOM	10916	CB	VAL	D	233	-14.707	-3.810	-14.755	1.00	17.64	6	D	C
ATOM	10917	CG1	VAL	D	233	-14.596	-5.299	-15.182	1.00	17.46	6	D	C
ATOM	10918	CG2	VAL	D	233	-13.332	-3.240	-14.473	1.00	16.55	6	D	C
ATOM	10919	N	GLN	D	234	-14.914	-0.637	-15.914	1.00	17.96	7	D	N
ATOM	10920	CA	GLN	D	234	-15.164	0.755	-15.532	1.00	16.80	6	D	C
ATOM	10921	C	GLN	D	234	-14.870	1.574	-16.766	1.00	17.20	6	D	C
ATOM	10922	O	GLN	D	234	-13.883	1.220	-17.483	1.00	16.87	8	D	O
ATOM	10923	CB	GLN	D	234	-14.367	1.179	-14.293	1.00	17.85	6	D	C
ATOM	10924	CG	GLN	D	234	-14.833	2.466	-13.676	1.00	15.00	6	D	C
ATOM	10925	GD	GLN	D	234	-16.119	2.380	-12.842	1.00	17.01	6	D	C
ATOM	10926	OE1	GLN	D	234	-16.608	3.452	-12.422	1.00	14.28	8	D	O
ATOM	10927	NE2	GLN	D	234	-16.637	1.197	-12.561	1.00	12.61	7	D	N
ATOM	10928	N	TRP	D	235	-15.634	2.620	-17.044	1.00	15.72	7	D	N
ATOM	10929	CA	TRP	D	235	-15.442	3.387	-18.271	1.00	18.35	6	D	C
ATOM	10930	C	TRP	D	235	-14.000	3.824	-18.490	1.00	18.71	6	D	C
ATOM	10931	O	TRP	D	235	-13.542	3.749	-19.642	1.00	18.18	8	D	O
ATOM	10932	CB	TRP	D	235	-16.406	4.601	-18.373	1.00	17.67	6	D	C
ATOM	10933	CG	TRP	D	235	-16.001	5.700	-17.412	1.00	20.05	6	D	C
ATOM	10934	CD1	TRP	D	235	-16.287	5.752	-16.063	1.00	18.60	6	D	C
ATOM	10935	CD2	TRP	D	235	-15.183	6.831	-17.701	1.00	20.41	6	D	C
ATOM	10936	NE1	TRP	D	235	-15.659	6.814	-15.502	1.00	20.62	7	D	N
ATOM	10937	CE2	TRP	D	235	-14.953	7.503	-16.477	1.00	21.54	6	D	C
ATOM	10938	CE3	TRP	D	235	-14.582	7.300	-18.878	1.00	19.77	6	D	C
ATOM	10939	CZ2	TRP	D	235	-14.235	8.694	-16.411	1.00	19.83	6	D	C
ATOM	10940	CZ3	TRP	D	235	-13.821	8.471	-18.835	1.00	18.92	6	D	C
ATOM	10941	CH2	TRP	D	235	-13.622	9.125	-17.591	1.00	19.41	6	D	C
ATOM	10942	N	ASP	D	236	-13.324	4.317	-17.443	1.00	18.10	7	D	N
ATOM	10943	CA	ASP	D	236	-11.984	4.864	-17.744	1.00	18.34	6	D	C
ATOM	10944	C	ASP	D	236	-10.892	3.818	-17.890	1.00	19.78	6	D	C
ATOM	10945	O	ASP	D	236	-9.738	4.228	-17.973	1.00	20.11	8	D	O
ATOM	10946	CB	ASP	D	236	-11.593	5.902	-16.690	1.00	18.23	6	D	C
ATOM	10947	CG	ASP	D	236	-11.748	5.312	-15.281	1.00	21.12	6	D	C
ATOM	10948	OD1	ASP	D	236	-12.136	4.147	-15.100	1.00	16.14	8	D	O
ATOM	10949	OD2	ASP	D	236	-11.430	6.081	-14.332	1.00	23.73	8	D	O
ATOM	10950	N	ARG	D	237	-11.210	2.539	-17.887	1.00	18.40	7	D	N
ATOM	10951	CA	ARG	D	237	-10.225	1.497	-18.120	1.00	17.69	6	D	C
ATOM	10952	C	ARG	D	237	-10.225	0.996	-19.563	1.00	18.17	6	D	C
ATOM	10953	O	ARG	D	237	-9.476	0.087	-19.882	1.00	18.22	8	D	O
ATOM	10954	CB	ARG	D	237	-10.537	0.364	-17.142	1.00	20.33	6	D	C
ATOM	10955	CG	ARG	D	237	-10.232	0.852	-15.697	1.00	22.25	6	D	C
ATOM	10956	CD	ARG	D	237	-10.201	-0.229	-14.647	1.00	24.13	6	D	C
ATOM	10957	NE	ARG	D	237	-9.317	-1.331	-14.926	1.00	24.65	7	D	N
ATOM	10958	CZ	ARG	D	237	-9.358	-2.522	-14.343	1.00	23.17	6	D	C
ATOM	10959	NH1	ARG	D	237	-8.502	-3.465	-14.713	1.00	26.76	7	D	N
ATOM	10960	NH2	ARG	D	237	-10.208	-2.807	-13.399	1.00	21.27	7	D	N
ATOM	10961	N	LYS	D	238	-11.162	1.470	-20.395	1.00	17.11	7	D	N
ATOM	10962	CA	LYS	D	238	-11.313	1.060	-21.773	1.00	15.39	6	D	C
ATOM	10963	C	LYS	D	238	-10.123	1.564	-22.575	1.00	16.07	6	D	C
ATOM	10964	O	LYS	D	238	-9.877	2.775	-22.516	1.00	14.90	8	D	O
ATOM	10965	CB	LYS	D	238	-12.674	1.498	-22.315	1.00	16.77	6	D	C
ATOM	10966	CG	LYS	D	238	-13.809	0.704	-21.625	1.00	16.19	6	D	C
ATOM	10967	CD	LYS	D	238	-15.177	1.235	-22.149	1.00	19.21	6	D	C
ATOM	10968	CE	LYS	D	238	-16.277	0.475	-21.411	1.00	19.68	6	D	C
ATOM	10969	NZ	LYS	D	238	-17.657	0.646	-21.923	1.00	20.39	7	D	N
ATOM	10970	N	LEU	D	239	-9.387	0.688	-23.214	1.00	14.21	7	D	N
ATOM	10971	CA	LEU	D	239	-8.191	1.127	-23.962	1.00	16.39	6	D	C
ATOM	10972	C	LEU	D	239	-8.518	1.929	-25.214	1.00	17.89	6	D	C
ATOM	10973	O	LEU	D	239	-7.824	2.911	-25.543	1.00	17.24	8	D	O
ATOM	10974	CB	LEU	D	239	-7.281	-0.075	-24.241	1.00	16.09	6	D	C

140/188

ATOM	10975	CG	LEU	D	239	-5.974	0.218	-25.005	1.00	16.88	6	D	C
ATOM	10976	CD1	LEU	D	239	-5.111	1.267	-24.310	1.00	14.44	6	D	C
ATOM	10977	CD2	LEU	D	239	-5.200	-1.122	-25.157	1.00	15.59	6	D	C
ATOM	10978	N	ASP	D	240	-9.601	1.591	-25.937	1.00	15.22	7	D	N
ATOM	10979	CA	ASP	D	240	-9.924	2.438	-27.098	1.00	17.62	6	D	C
ATOM	10980	C	ASP	D	240	-10.170	3.876	-26.654	1.00	16.36	6	D	C
ATOM	10981	O	ASP	D	240	-9.723	4.846	-27.268	1.00	16.42	8	D	O
ATOM	10982	CB	ASP	D	240	-11.115	1.905	-27.896	1.00	17.27	6	D	C
ATOM	10983	CG	ASP	D	240	-12.328	1.493	-27.093	1.00	18.39	6	D	C
ATOM	10984	OD1	ASP	D	240	-12.381	1.520	-25.861	1.00	18.01	8	D	O
ATOM	10985	OD2	ASP	D	240	-13.388	1.133	-27.668	1.00	19.82	8	D	O
ATOM	10986	N	ALA	D	241	-10.891	4.007	-25.539	1.00	15.83	7	D	N
ATOM	10987	CA	ALA	D	241	-11.220	5.325	-24.999	1.00	17.73	6	D	C
ATOM	10988	C	ALA	D	241	-9.951	6.031	-24.552	1.00	17.41	6	D	C
ATOM	10989	O	ALA	D	241	-9.765	7.249	-24.732	1.00	17.08	8	D	O
ATOM	10990	CB	ALA	D	241	-12.215	5.191	-23.788	1.00	15.97	6	D	C
ATOM	10991	N	ARG	D	242	-9.049	5.276	-23.918	1.00	17.09	7	D	N
ATOM	10992	CA	ARG	D	242	-7.774	5.912	-23.552	1.00	16.53	6	D	C
ATOM	10993	C	ARG	D	242	-7.063	6.437	-24.770	1.00	16.38	6	D	C
ATOM	10994	O	ARG	D	242	-6.477	7.536	-24.762	1.00	15.50	8	D	O
ATOM	10995	CB	ARG	D	242	-6.871	4.909	-22.772	1.00	16.93	6	D	C
ATOM	10996	CG	ARG	D	242	-7.366	4.769	-21.328	1.00	21.07	6	D	C
ATOM	10997	CD	ARG	D	242	-6.614	3.692	-20.546	1.00	23.82	6	D	C
ATOM	10998	NE	ARG	D	242	-7.203	3.577	-19.198	1.00	26.03	7	D	N
ATOM	10999	CZ	ARG	D	242	-6.566	2.894	-18.230	1.00	25.27	6	D	C
ATOM	11000	NH1	ARG	D	242	-5.412	2.288	-18.467	1.00	23.33	7	D	N
ATOM	11001	NH2	ARG	D	242	-7.084	2.830	-17.027	1.00	25.98	7	D	N
ATOM	11002	N	LEU	D	243	-6.984	5.620	-25.828	1.00	16.93	7	D	N
ATOM	11003	CA	LEU	D	243	-6.329	6.053	-27.075	1.00	19.14	6	D	C
ATOM	11004	C	LEU	D	243	-7.062	7.266	-27.658	1.00	18.88	6	D	C
ATOM	11005	O	LEU	D	243	-6.495	8.164	-28.301	1.00	17.36	8	D	O
ATOM	11006	CB	LEU	D	243	-6.383	4.876	-28.078	1.00	18.23	6	D	C
ATOM	11007	CG	LEU	D	243	-5.409	3.701	-27.840	1.00	17.49	6	D	C
ATOM	11008	CD1	LEU	D	243	-5.721	2.512	-28.724	1.00	17.52	6	D	C
ATOM	11009	CD2	LEU	D	243	-3.966	4.089	-28.192	1.00	15.48	6	D	C
ATOM	11010	N	ALA	D	244	-8.404	7.259	-27.527	1.00	18.52	7	D	N
ATOM	11011	CA	ALA	D	244	-9.163	8.401	-28.088	1.00	19.73	6	D	C
ATOM	11012	C	ALA	D	244	-8.718	9.740	-27.503	1.00	19.97	6	D	C
ATOM	11013	O	ALA	D	244	-8.586	10.739	-28.225	1.00	18.33	8	D	O
ATOM	11014	CB	ALA	D	244	-10.659	8.218	-27.893	1.00	18.39	6	D	C
ATOM	11015	N	GLN	D	245	-8.485	9.784	-26.182	1.00	15.39	7	D	N
ATOM	11016	CA	GLN	D	245	-8.002	11.040	-25.598	1.00	18.46	6	D	C
ATOM	11017	C	GLN	D	245	-6.630	11.406	-26.179	1.00	18.68	6	D	C
ATOM	11018	O	GLN	D	245	-6.344	12.518	-26.563	1.00	17.40	8	D	O
ATOM	11019	CB	GLN	D	245	-7.834	10.919	-24.070	1.00	17.83	6	D	C
ATOM	11020	CG	GLN	D	245	-7.111	12.041	-23.359	1.00	21.85	6	D	C
ATOM	11021	CD	GLN	D	245	-7.095	11.964	-21.827	1.00	25.02	6	D	C
ATOM	11022	OE1	GLN	D	245	-7.155	12.943	-21.061	1.00	26.62	8	D	O
ATOM	11023	NE2	GLN	D	245	-6.780	10.768	-21.358	1.00	21.42	7	D	N
ATOM	11024	N	ALA	D	246	-5.751	10.403	-26.240	1.00	17.57	7	D	N
ATOM	11025	CA	ALA	D	246	-4.400	10.740	-26.706	1.00	20.00	6	D	C
ATOM	11026	C	ALA	D	246	-4.333	11.206	-28.150	1.00	17.92	6	D	C
ATOM	11027	O	ALA	D	246	-3.642	12.187	-28.531	1.00	19.59	8	D	O
ATOM	11028	CB	ALA	D	246	-3.581	9.478	-26.522	1.00	19.91	6	D	C
ATOM	11029	N	VAL	D	247	-5.171	10.630	-28.994	1.00	17.42	7	D	N
ATOM	11030	CA	VAL	D	247	-5.175	11.041	-30.401	1.00	16.19	6	D	C
ATOM	11031	C	VAL	D	247	-5.723	12.461	-30.540	1.00	17.86	6	D	C
ATOM	11032	O	VAL	D	247	-5.171	13.361	-31.216	1.00	17.85	8	D	O
ATOM	11033	CB	VAL	D	247	-5.976	10.042	-31.268	1.00	15.31	6	D	C
ATOM	11034	CG1	VAL	D	247	-6.173	10.641	-32.677	1.00	14.78	6	D	C
ATOM	11035	CG2	VAL	D	247	-5.134	8.763	-31.385	1.00	15.06	6	D	C
ATOM	11036	N	VAL	D	248	-6.871	12.700	-29.916	1.00	13.15	7	D	N
ATOM	11037	CA	VAL	D	248	-7.504	14.004	-30.024	1.00	13.69	6	D	C
ATOM	11038	C	VAL	D	248	-6.699	15.085	-29.320	1.00	15.56	6	D	C
ATOM	11039	O	VAL	D	248	-6.710	16.217	-29.811	1.00	13.82	8	D	O
ATOM	11040	CB	VAL	D	248	-8.950	13.929	-29.501	1.00	16.32	6	D	C
ATOM	11041	CG1	VAL	D	248	-9.574	15.315	-29.360	1.00	13.85	6	D	C
ATOM	11042	CG2	VAL	D	248	-9.755	13.107	-30.549	1.00	16.47	6	D	C
ATOM	11043	N	SER	D	249	-5.745	14.736	-28.468	1.00	15.05	7	D	N
ATOM	11044	CA	SER	D	249	-4.916	15.758	-27.812	1.00	16.44	6	D	C
ATOM	11045	C	SER	D	249	-3.770	16.293	-28.685	1.00	16.88	6	D	C
ATOM	11046	O	SER	D	249	-2.968	17.186	-28.369	1.00	15.59	8	D	O
ATOM	11047	CB	SER	D	249	-4.334	15.073	-26.551	1.00	16.57	6	D	C
ATOM	11048	OG	SER	D	249	-3.272	14.184	-26.900	1.00	16.14	8	D	O
ATOM	11049	N	ILE	D	250	-3.606	15.646	-29.831	1.00	16.45	7	D	N
ATOM	11050	CA	ILE	D	250	-2.597	16.026	-30.800	1.00	17.83	6	D	C
ATOM	11051	C	ILE	D	250	-3.090	17.317	-31.458	1.00	18.50	6	D	C
ATOM	11052	O	ILE	D	250	-4.262	17.488	-31.748	1.00	17.08	8	D	O
ATOM	11053	CB	ILE	D	250	-2.344	14.974	-31.891	1.00	17.75	6	D	C

141/188

ATOM	11054	CG1	ILE	D	250	-1.815	13.656	-31.255	1.00	17.10	6	D	C
ATOM	11055	CG2	ILE	D	250	-1.263	15.474	-32.841	1.00	16.28	6	D	C
ATOM	11056	CD1	ILE	D	250	-1.894	12.502	-32.269	1.00	15.85	6	D	C
ATOM	11057	N	ASN	D	251	-2.206	18.328	-31.428	1.00	17.09	7	D	N
ATOM	11058	CA	ASN	D	251	-2.523	19.583	-32.086	1.00	18.71	6	D	C
ATOM	11059	C	ASN	D	251	-3.238	19.428	-33.430	1.00	19.03	6	D	C
ATOM	11060	O	ASN	D	251	-2.767	18.612	-34.249	1.00	17.37	8	D	O
ATOM	11061	CB	ASN	D	251	-1.200	20.291	-32.422	1.00	19.71	6	D	C
ATOM	11062	CG	ASN	D	251	-0.454	20.712	-31.186	1.00	22.47	6	D	C
ATOM	11063	OD1	ASN	D	251	-0.321	19.876	-30.283	1.00	21.45	8	D	O
ATOM	11064	ND2	ASN	D	251	-0.025	21.985	-31.170	1.00	24.68	7	D	N
ATOM	11065	N	ALA	D	252	-4.306	20.188	-33.596	1.00	18.22	7	D	N
ATOM	11066	CA	ALA	D	252	-5.106	20.205	-34.833	1.00	18.66	6	D	C
ATOM	11067	C	ALA	D	252	-6.016	19.019	-35.036	1.00	18.19	6	D	C
ATOM	11068	O	ALA	D	252	-6.822	19.054	-35.993	1.00	17.59	8	D	O
ATOM	11069	CB	ALA	D	252	-4.252	20.449	-36.083	1.00	16.65	6	D	C
ATOM	11070	N	PHE	D	253	-6.021	18.040	-34.106	1.00	19.86	7	D	N
ATOM	11071	CA	PHE	D	253	-6.848	16.862	-34.372	1.00	19.01	6	D	C
ATOM	11072	C	PHE	D	253	-8.288	17.151	-33.926	1.00	20.40	6	D	C
ATOM	11073	O	PHE	D	253	-8.427	17.694	-32.807	1.00	17.01	8	D	O
ATOM	11074	CB	PHE	D	253	-6.268	15.622	-33.700	1.00	19.91	6	D	C
ATOM	11075	CG	PHE	D	253	-5.206	14.922	-34.569	1.00	21.27	6	D	C
ATOM	11076	CD1	PHE	D	253	-4.058	15.547	-34.977	1.00	19.25	6	D	C
ATOM	11077	CD2	PHE	D	253	-5.424	13.613	-34.955	1.00	21.37	6	D	C
ATOM	11078	CE1	PHE	D	253	-3.131	14.870	-35.750	1.00	21.75	6	D	C
ATOM	11079	CE2	PHE	D	253	-4.503	12.921	-35.735	1.00	23.61	6	D	C
ATOM	11080	CZ	PHE	D	253	-3.330	13.554	-36.136	1.00	21.50	6	D	C
ATOM	11081	N	LYS	D	254	-9.266	16.792	-34.758	1.00	17.29	7	D	N
ATOM	11082	CA	LYS	D	254	-10.658	17.040	-34.351	1.00	18.24	6	D	C
ATOM	11083	C	LYS	D	254	-11.516	15.807	-34.239	1.00	17.27	6	D	C
ATOM	11084	O	LYS	D	254	-12.737	15.934	-34.164	1.00	19.88	8	D	O
ATOM	11085	CB	LYS	D	254	-11.319	18.042	-35.346	1.00	18.35	6	D	C
ATOM	11086	CG	LYS	D	254	-10.474	19.316	-35.456	1.00	19.81	6	D	C
ATOM	11087	CD	LYS	D	254	-10.542	20.177	-34.231	1.00	18.74	6	D	C
ATOM	11088	CE	LYS	D	254	-11.838	20.911	-34.034	1.00	16.43	6	D	C
ATOM	11089	NZ	LYS	D	254	-11.792	21.682	-32.753	1.00	17.41	7	D	N
ATOM	11090	N	GLY	D	255	-11.000	14.606	-34.170	1.00	18.28	7	D	N
ATOM	11091	CA	GLY	D	255	-11.783	13.398	-34.108	1.00	15.81	6	D	C
ATOM	11092	C	GLY	D	255	-10.861	12.190	-34.230	1.00	15.79	6	D	C
ATOM	11093	O	GLY	D	255	-9.697	12.279	-34.671	1.00	17.52	8	D	O
ATOM	11094	N	VAL	D	256	-11.384	11.082	-33.785	1.00	16.19	7	D	N
ATOM	11095	CA	VAL	D	256	-10.675	9.814	-33.753	1.00	16.11	6	D	C
ATOM	11096	C	VAL	D	256	-11.672	8.690	-33.963	1.00	17.01	6	D	C
ATOM	11097	O	VAL	D	256	-12.814	8.839	-33.514	1.00	15.25	8	D	O
ATOM	11098	CB	VAL	D	256	-9.953	9.754	-32.393	1.00	17.73	6	D	C
ATOM	11099	CG1	VAL	D	256	-10.992	9.762	-31.226	1.00	15.33	6	D	C
ATOM	11100	CG2	VAL	D	256	-9.145	8.474	-32.325	1.00	16.41	6	D	C
ATOM	11101	N	GLU	D	257	-11.303	7.586	-34.651	1.00	15.70	7	D	N
ATOM	11102	CA	GLU	D	257	-12.313	6.565	-34.846	1.00	18.49	6	D	C
ATOM	11103	C	GLU	D	257	-11.590	5.221	-34.908	1.00	19.51	6	D	C
ATOM	11104	O	GLU	D	257	-10.400	5.144	-35.241	1.00	21.03	8	D	O
ATOM	11105	CB	GLU	D	257	-13.099	6.944	-36.136	1.00	17.43	6	D	C
ATOM	11106	CG	GLU	D	257	-12.358	6.540	-37.398	1.00	18.64	6	D	C
ATOM	11107	CD	GLU	D	257	-13.145	6.910	-38.666	1.00	23.67	6	D	C
ATOM	11108	OE1	GLU	D	257	-14.347	7.211	-38.654	1.00	18.94	8	D	O
ATOM	11109	OE2	GLU	D	257	-12.453	6.911	-39.710	1.00	26.98	8	D	O
ATOM	11110	N	PHE	D	258	-12.289	4.185	-34.566	1.00	15.49	7	D	N
ATOM	11111	CA	PHE	D	258	-11.721	2.842	-34.527	1.00	20.44	6	D	C
ATOM	11112	C	PHE	D	258	-12.349	1.879	-35.541	1.00	20.44	6	D	C
ATOM	11113	O	PHE	D	258	-13.553	1.763	-35.567	1.00	18.76	8	D	O
ATOM	11114	CB	PHE	D	258	-11.883	2.274	-33.131	1.00	18.00	6	D	C
ATOM	11115	CG	PHE	D	258	-11.188	3.160	-32.117	1.00	20.61	6	D	C
ATOM	11116	CD1	PHE	D	258	-11.805	4.304	-31.626	1.00	20.12	6	D	C
ATOM	11117	CD2	PHE	D	258	-9.892	2.842	-31.723	1.00	19.17	6	D	C
ATOM	11118	CE1	PHE	D	258	-11.124	5.123	-30.737	1.00	22.26	6	D	C
ATOM	11119	CE2	PHE	D	258	-9.236	3.653	-30.814	1.00	21.11	6	D	C
ATOM	11120	CZ	PHE	D	258	-9.841	4.796	-30.324	1.00	19.97	6	D	C
ATOM	11121	N	GLY	D	259	-11.510	1.181	-36.278	1.00	20.29	7	D	N
ATOM	11122	CA	GLY	D	259	-11.967	0.182	-37.272	1.00	22.57	6	D	C
ATOM	11123	C	GLY	D	259	-12.839	0.866	-38.341	1.00	22.63	6	D	C
ATOM	11124	O	GLY	D	259	-12.384	1.846	-38.887	1.00	21.08	8	D	O
ATOM	11125	N	LEU	D	260	-14.028	0.368	-38.597	1.00	22.25	7	D	N
ATOM	11126	CA	LEU	D	260	-14.919	1.068	-39.537	1.00	24.00	6	D	C
ATOM	11127	C	LEU	D	260	-15.173	2.505	-39.073	1.00	22.98	6	D	C
ATOM	11128	O	LEU	D	260	-15.391	3.387	-39.908	1.00	22.54	8	D	O
ATOM	11129	CB	LEU	D	260	-16.272	0.343	-39.563	1.00	25.29	6	D	C
ATOM	11130	CG	LEU	D	260	-16.258	-0.997	-40.307	1.00	28.17	6	D	C
ATOM	11131	CD1	LEU	D	260	-17.651	-1.593	-40.418	1.00	27.88	6	D	C
ATOM	11132	CD2	LEU	D	260	-15.644	-0.859	-41.693	1.00	28.75	6	D	C

142/188

ATOM	11133	N	GLY	D	261	-15.219	2.704	-37.745	1.00	22.00	7	D	N
ATOM	11134	CA	GLY	D	261	-15.401	4.035	-37.196	1.00	19.96	6	D	C
ATOM	11135	C	GLY	D	261	-16.779	4.628	-37.493	1.00	18.76	6	D	C
ATOM	11136	O	GLY	D	261	-17.794	3.953	-37.305	1.00	18.44	8	D	O
ATOM	11137	N	PHE	D	262	-16.804	5.890	-37.942	1.00	17.97	7	D	N
ATOM	11138	CA	PHE	D	262	-18.034	6.537	-38.283	1.00	19.05	6	D	C
ATOM	11139	C	PHE	D	262	-18.808	5.761	-39.354	1.00	19.90	6	D	C
ATOM	11140	O	PHE	D	262	-20.042	5.818	-39.286	1.00	20.98	8	D	O
ATOM	11141	CB	PHE	D	262	-17.800	8.023	-38.704	1.00	19.91	6	D	C
ATOM	11142	CG	PHE	D	262	-17.749	8.877	-37.466	1.00	19.97	6	D	C
ATOM	11143	CD1	PHE	D	262	-18.900	9.450	-36.936	1.00	21.17	6	D	C
ATOM	11144	CD2	PHE	D	262	-16.539	9.055	-36.813	1.00	19.22	6	D	C
ATOM	11145	CE1	PHE	D	262	-18.810	10.227	-35.777	1.00	21.18	6	D	C
ATOM	11146	CE2	PHE	D	262	-16.470	9.811	-35.663	1.00	19.32	6	D	C
ATOM	11147	CZ	PHE	D	262	-17.596	10.369	-35.115	1.00	19.08	6	D	C
ATOM	11148	N	GLU	D	263	-18.141	4.998	-40.216	1.00	20.82	7	D	N
ATOM	11149	CA	GLU	D	263	-18.937	4.212	-41.186	1.00	23.73	6	D	C
ATOM	11150	C	GLU	D	263	-19.866	3.226	-40.511	1.00	22.70	6	D	C
ATOM	11151	O	GLU	D	263	-20.908	2.835	-41.037	1.00	24.85	8	D	O
ATOM	11152	CB	GLU	D	263	-18.005	3.475	-42.157	1.00	22.88	6	D	C
ATOM	11153	CG	GLU	D	263	-18.733	2.576	-43.145	1.00	29.10	6	D	C
ATOM	11154	CD	GLU	D	263	-17.793	2.094	-44.248	1.00	32.87	6	D	C
ATOM	11155	OE1	GLU	D	263	-16.669	2.649	-44.371	1.00	33.13	8	D	O
ATOM	11156	OE2	GLU	D	263	-18.189	1.155	-44.996	1.00	34.53	8	D	O
ATOM	11157	N	ALA	D	264	-19.532	2.812	-39.290	1.00	22.30	7	D	N
ATOM	11158	CA	ALA	D	264	-20.283	1.810	-38.564	1.00	22.52	6	D	C
ATOM	11159	C	ALA	D	264	-21.672	2.342	-38.237	1.00	20.45	6	D	C
ATOM	11160	O	ALA	D	264	-22.626	1.587	-38.104	1.00	20.43	8	D	O
ATOM	11161	CB	ALA	D	264	-19.544	1.250	-37.369	1.00	22.75	6	D	C
ATOM	11162	N	GLY	D	265	-21.803	3.667	-38.189	1.00	21.07	7	D	N
ATOM	11163	CA	GLY	D	265	-23.096	4.272	-37.946	1.00	21.11	6	D	C
ATOM	11164	C	GLY	D	265	-23.902	4.269	-39.254	1.00	22.05	6	D	C
ATOM	11165	O	GLY	D	265	-25.029	4.759	-39.221	1.00	23.62	8	D	O
ATOM	11166	N	TYR	D	266	-23.374	3.807	-40.356	1.00	23.58	7	D	N
ATOM	11167	CA	TYR	D	266	-24.111	3.770	-41.638	1.00	24.18	6	D	C
ATOM	11168	C	TYR	D	266	-24.359	2.343	-42.108	1.00	27.34	6	D	C
ATOM	11169	O	TYR	D	266	-24.737	2.097	-43.254	1.00	29.54	8	D	O
ATOM	11170	CB	TYR	D	266	-23.248	4.442	-42.714	1.00	24.56	6	D	C
ATOM	11171	CG	TYR	D	266	-23.115	5.936	-42.517	1.00	24.23	6	D	C
ATOM	11172	CD1	TYR	D	266	-22.324	6.462	-41.497	1.00	24.23	6	D	C
ATOM	11173	CD2	TYR	D	266	-23.839	6.808	-43.315	1.00	26.44	6	D	C
ATOM	11174	CE1	TYR	D	266	-22.223	7.837	-41.307	1.00	26.24	6	D	C
ATOM	11175	CE2	TYR	D	266	-23.730	8.185	-43.119	1.00	27.28	6	D	C
ATOM	11176	CZ	TYR	D	266	-22.911	8.689	-42.136	1.00	26.18	6	D	C
ATOM	11177	OH	TYR	D	266	-22.802	10.056	-41.995	1.00	28.59	8	D	O
ATOM	11178	N	ARG	D	267	-24.142	1.335	-41.288	1.00	26.48	7	D	N
ATOM	11179	CA	ARG	D	267	-24.302	-0.059	-41.695	1.00	29.60	6	D	C
ATOM	11180	C	ARG	D	267	-25.130	-0.891	-40.713	1.00	29.13	6	D	C
ATOM	11181	O	ARG	D	267	-25.505	-0.449	-39.628	1.00	28.07	8	D	O
ATOM	11182	CB	ARG	D	267	-22.937	-0.725	-41.804	1.00	28.85	6	D	C
ATOM	11183	CG	ARG	D	267	-22.074	-0.154	-42.927	1.00	33.98	6	D	C
ATOM	11184	CD	ARG	D	267	-20.931	-1.137	-43.049	1.00	37.40	6	D	C
ATOM	11185	NE	ARG	D	267	-19.890	-0.805	-44.001	1.00	40.20	7	D	N
ATOM	11186	CZ	ARG	D	267	-18.985	-1.750	-44.304	1.00	42.27	6	D	C
ATOM	11187	NH1	ARG	D	267	-19.058	-2.960	-43.745	1.00	43.92	7	D	N
ATOM	11188	NH2	ARG	D	267	-18.010	-1.498	-45.167	1.00	42.42	7	D	N
ATOM	11189	N	LYS	D	268	-25.408	-2.126	-41.122	1.00	27.65	7	D	N
ATOM	11190	CA	LYS	D	268	-26.175	-3.034	-40.289	1.00	27.25	6	D	C
ATOM	11191	C	LYS	D	268	-25.283	-3.901	-39.404	1.00	27.15	6	D	C
ATOM	11192	O	LYS	D	268	-24.153	-4.138	-39.779	1.00	28.50	8	D	O
ATOM	11193	CB	LYS	D	268	-27.041	-3.957	-41.155	1.00	30.38	6	D	C
ATOM	11194	CG	LYS	D	268	-28.119	-3.115	-41.867	1.00	34.40	6	D	C
ATOM	11195	CD	LYS	D	268	-28.610	-3.812	-43.132	1.00	38.31	6	D	C
ATOM	11196	CE	LYS	D	268	-29.518	-4.971	-42.810	1.00	39.09	6	D	C
ATOM	11197	NZ	LYS	D	268	-30.941	-4.591	-42.619	1.00	40.90	7	D	N
ATOM	11198	N	GLY	D	269	-25.826	-4.359	-38.312	1.00	22.74	7	D	N
ATOM	11199	CA	GLY	D	269	-25.164	-5.250	-37.384	1.00	27.15	6	D	C
ATOM	11200	C	GLY	D	269	-24.438	-6.357	-38.136	1.00	28.53	6	D	C
ATOM	11201	O	GLY	D	269	-23.259	-6.570	-37.901	1.00	26.98	8	D	O
ATOM	11202	N	SER	D	270	-25.131	-7.035	-39.055	1.00	28.50	7	D	N
ATOM	11203	CA	SER	D	270	-24.466	-8.142	-39.752	1.00	28.98	6	D	C
ATOM	11204	C	SER	D	270	-23.332	-7.663	-40.617	1.00	29.98	6	D	C
ATOM	11205	O	SER	D	270	-22.510	-8.481	-41.025	1.00	29.85	8	D	O
ATOM	11206	CB	SER	D	270	-25.503	-8.903	-40.615	1.00	28.54	6	D	C
ATOM	11207	OG	SER	D	270	-26.179	-7.891	-41.327	1.00	28.70	8	D	O
ATOM	11208	N	GLN	D	271	-23.265	-6.367	-40.937	1.00	30.25	7	D	N
ATOM	11209	CA	GLN	D	271	-22.139	-5.937	-41.775	1.00	31.02	6	D	C
ATOM	11210	C	GLN	D	271	-20.984	-5.498	-40.895	1.00	30.04	6	D	C
ATOM	11211	O	GLN	D	271	-19.952	-5.160	-41.450	1.00	31.30	8	D	O

143/188

ATOM	11212	CB	GLN	D	271	-22.552	-4.813	-42.732	1.00	32.58	6	D	C
ATOM	11213	CG	GLN	D	271	-23.669	-5.141	-43.707	1.00	34.54	6	D	C
ATOM	11214	CD	GLN	D	271	-24.373	-4.007	-44.400	1.00	36.76	6	D	C
ATOM	11215	OE1	GLN	D	271	-24.437	-2.839	-43.990	1.00	36.83	8	D	O
ATOM	11216	NE2	GLN	D	271	-24.974	-4.308	-45.560	1.00	37.10	7	D	N
ATOM	11217	N	VAL	D	272	-21.106	-5.420	-39.593	1.00	29.39	7	D	N
ATOM	11218	CA	VAL	D	272	-20.083	-4.899	-38.692	1.00	30.06	6	D	C
ATOM	11219	C	VAL	D	272	-19.446	-5.885	-37.722	1.00	31.00	6	D	C
ATOM	11220	O	VAL	D	272	-18.215	-5.750	-37.510	1.00	31.08	8	D	O
ATOM	11221	CB	VAL	D	272	-20.669	-3.701	-37.887	1.00	30.31	6	D	C
ATOM	11222	CG1	VAL	D	272	-19.738	-3.100	-36.835	1.00	29.09	6	D	C
ATOM	11223	CG2	VAL	D	272	-21.137	-2.574	-38.797	1.00	29.44	6	D	C
ATOM	11224	N	MET	D	273	-20.158	-6.730	-36.976	1.00	30.27	7	D	N
ATOM	11225	CA	MET	D	273	-19.462	-7.604	-36.010	1.00	30.97	6	D	C
ATOM	11226	C	MET	D	273	-18.467	-8.539	-36.709	1.00	29.13	6	D	C
ATOM	11227	O	MET	D	273	-18.599	-8.903	-37.868	1.00	29.30	8	D	O
ATOM	11228	CB	MET	D	273	-20.347	-8.424	-35.069	1.00	31.08	6	D	C
ATOM	11229	CG	MET	D	273	-21.800	-8.032	-34.895	1.00	30.78	6	D	C
ATOM	11230	SE	MET	D	273	-20.937	-6.121	-33.734	1.00	53.94	34	D	SE
ATOM	11231	CE2	MET	D	273	-22.596	-5.101	-34.632	1.00	34.26	6	D	C
ATOM	11232	N	ASP	D	274	-17.384	-8.889	-36.045	1.00	27.94	7	D	N
ATOM	11233	CA	ASP	D	274	-16.341	-9.725	-36.624	1.00	24.85	6	D	C
ATOM	11234	C	ASP	D	274	-16.436	-11.134	-36.045	1.00	24.86	6	D	C
ATOM	11235	O	ASP	D	274	-16.413	-11.250	-34.825	1.00	19.89	8	D	O
ATOM	11236	CB	ASP	D	274	-14.975	-9.185	-36.240	1.00	24.58	6	D	C
ATOM	11237	CG	ASP	D	274	-14.734	-7.834	-36.862	1.00	23.63	6	D	C
ATOM	11238	OD1	ASP	D	274	-15.031	-7.562	-38.063	1.00	22.48	8	D	O
ATOM	11239	OD2	ASP	D	274	-14.137	-7.071	-36.072	1.00	20.10	8	D	O
ATOM	11240	N	GLU	D	275	-16.847	-12.059	-36.908	1.00	22.51	7	D	N
ATOM	11241	CA	GLU	D	275	-17.094	-13.404	-36.428	1.00	22.70	6	D	C
ATOM	11242	C	GLU	D	275	-15.854	-14.007	-35.799	1.00	20.62	6	D	C
ATOM	11243	O	GLU	D	275	-14.715	-13.667	-36.123	1.00	22.44	8	D	O
ATOM	11244	CB	GLU	D	275	-17.635	-14.251	-37.608	1.00	25.21	6	D	C
ATOM	11245	CG	GLU	D	275	-19.038	-13.751	-38.019	1.00	25.63	6	D	C
ATOM	11246	CD	GLU	D	275	-19.573	-14.694	-39.086	1.00	27.99	6	D	C
ATOM	11247	OE1	GLU	D	275	-20.700	-15.185	-38.984	1.00	29.53	8	D	O
ATOM	11248	OE2	GLU	D	275	-18.803	-14.983	-40.011	1.00	28.68	8	D	O
ATOM	11249	N	ILE	D	276	-16.063	-14.923	-34.897	1.00	19.66	7	D	N
ATOM	11250	CA	ILE	D	276	-15.001	-15.566	-34.107	1.00	20.72	6	D	C
ATOM	11251	C	ILE	D	276	-14.651	-16.925	-34.706	1.00	21.67	6	D	C
ATOM	11252	O	ILE	D	276	-15.600	-17.675	-34.956	1.00	21.39	8	D	O
ATOM	11253	CB	ILE	D	276	-15.503	-15.754	-32.654	1.00	19.47	6	D	C
ATOM	11254	CG1	ILE	D	276	-15.717	-14.350	-32.043	1.00	20.42	6	D	C
ATOM	11255	CG2	ILE	D	276	-14.595	-16.565	-31.758	1.00	17.44	6	D	C
ATOM	11256	CD1	ILE	D	276	-16.500	-14.372	-30.761	1.00	19.74	6	D	C
ATOM	11257	N	LEU	D	277	-13.380	-17.153	-34.943	1.00	21.05	7	D	N
ATOM	11258	CA	LEU	D	277	-12.856	-18.385	-35.481	1.00	23.02	6	D	C
ATOM	11259	C	LEU	D	277	-11.757	-18.939	-34.581	1.00	24.22	6	D	C
ATOM	11260	O	LEU	D	277	-11.232	-18.233	-33.700	1.00	21.29	8	D	O
ATOM	11261	CB	LEU	D	277	-12.158	-18.075	-36.823	1.00	24.93	6	D	C
ATOM	11262	CG	LEU	D	277	-12.908	-17.342	-37.925	1.00	25.22	6	D	C
ATOM	11263	CD1	LEU	D	277	-11.892	-16.980	-39.022	1.00	25.38	6	D	C
ATOM	11264	CD2	LEU	D	277	-14.046	-18.176	-38.533	1.00	23.49	6	D	C
ATOM	11265	N	TRP	D	278	-11.558	-20.264	-34.666	1.00	25.42	7	D	N
ATOM	11266	CA	TRP	D	278	-10.552	-20.896	-33.812	1.00	24.82	6	D	C
ATOM	11267	C	TRP	D	278	-9.815	-21.932	-34.635	1.00	27.78	6	D	C
ATOM	11268	O	TRP	D	278	-10.408	-22.472	-35.571	1.00	25.36	8	D	O
ATOM	11269	CB	TRP	D	278	-11.220	-21.567	-32.617	1.00	27.94	6	D	C
ATOM	11270	CG	TRP	D	278	-10.266	-22.317	-31.732	1.00	29.54	6	D	C
ATOM	11271	CD1	TRP	D	278	-9.555	-21.793	-30.679	1.00	28.64	6	D	C
ATOM	11272	CD2	TRP	D	278	-9.803	-23.667	-31.906	1.00	30.50	6	D	C
ATOM	11273	NE1	TRP	D	278	-8.693	-22.720	-30.176	1.00	30.00	7	D	N
ATOM	11274	CE2	TRP	D	278	-8.866	-23.911	-30.884	1.00	31.59	6	D	C
ATOM	11275	CE3	TRP	D	278	-10.130	-24.688	-32.801	1.00	31.78	6	D	C
ATOM	11276	CZ2	TRP	D	278	-8.249	-25.153	-30.708	1.00	32.05	6	D	C
ATOM	11277	CZ3	TRP	D	278	-9.524	-25.931	-32.614	1.00	33.38	6	D	C
ATOM	11278	CH2	TRP	D	278	-8.592	-26.151	-31.589	1.00	32.16	6	D	C
ATOM	11279	N	SER	D	279	-8.523	-22.127	-34.395	1.00	28.99	7	D	N
ATOM	11280	CA	SER	D	279	-7.815	-23.218	-35.069	1.00	30.63	6	D	C
ATOM	11281	C	SER	D	279	-6.823	-23.799	-34.045	1.00	33.59	6	D	C
ATOM	11282	O	SER	D	279	-6.370	-23.068	-33.161	1.00	28.45	8	D	O
ATOM	11283	CB	SER	D	279	-7.023	-22.767	-36.305	1.00	30.10	6	D	C
ATOM	11284	OG	SER	D	279	-5.969	-21.915	-35.894	1.00	29.44	8	D	O
ATOM	11285	N	LYS	D	280	-6.570	-25.103	-34.176	1.00	36.73	7	D	N
ATOM	11286	CA	LYS	D	280	-5.598	-25.709	-33.261	1.00	42.14	6	D	C
ATOM	11287	C	LYS	D	280	-4.255	-25.042	-33.475	1.00	42.75	6	D	C
ATOM	11288	O	LYS	D	280	-3.509	-24.730	-32.552	1.00	44.01	8	D	O
ATOM	11289	CB	LYS	D	280	-5.544	-27.221	-33.423	1.00	42.87	6	D	C
ATOM	11290	CG	LYS	D	280	-5.574	-27.718	-34.860	1.00	47.13	6	D	C

144/188

ATOM	11291	CD	LYS	D	280	-4.381	-28.644	-35.113	1.00	49.01	6	D	C
ATOM	11292	CE	LYS	D	280	-4.667	-29.635	-36.222	1.00	51.30	6	D	C
ATOM	11293	NZ	LYS	D	280	-3.738	-30.810	-36.202	1.00	52.19	7	D	N
ATOM	11294	N	GLU	D	281	-3.959	-24.599	-34.680	1.00	45.32	7	D	N
ATOM	11295	CA	GLU	D	281	-2.687	-23.929	-34.955	1.00	46.60	6	D	C
ATOM	11296	C	GLU	D	281	-2.544	-22.572	-34.297	1.00	45.94	6	D	C
ATOM	11297	O	GLU	D	281	-1.485	-22.283	-33.720	1.00	46.96	8	D	O
ATOM	11298	CB	GLU	D	281	-2.483	-23.825	-36.469	1.00	49.25	6	D	C
ATOM	11299	CG	GLU	D	281	-2.452	-25.169	-37.166	1.00	51.82	6	D	C
ATOM	11300	CD	GLU	D	281	-3.754	-25.900	-37.342	1.00	53.55	6	D	C
ATOM	11301	OE1	GLU	D	281	-4.868	-25.387	-37.101	1.00	54.52	8	D	O
ATOM	11302	OE2	GLU	D	281	-3.649	-27.086	-37.746	1.00	54.87	8	D	O
ATOM	11303	N	ASP	D	282	-3.545	-21.705	-34.399	1.00	44.29	7	D	N
ATOM	11304	CA	ASP	D	282	-3.453	-20.357	-33.884	1.00	43.35	6	D	C
ATOM	11305	C	ASP	D	282	-4.335	-19.987	-32.700	1.00	40.09	6	D	C
ATOM	11306	O	ASP	D	282	-4.121	-18.888	-32.153	1.00	40.78	8	D	O
ATOM	11307	CB	ASP	D	282	-3.803	-19.362	-35.009	1.00	45.18	6	D	C
ATOM	11308	CG	ASP	D	282	-2.978	-19.528	-36.261	1.00	48.11	6	D	C
ATOM	11309	OD1	ASP	D	282	-3.473	-19.131	-37.342	1.00	50.19	8	D	O
ATOM	11310	OD2	ASP	D	282	-1.858	-20.061	-36.182	1.00	48.52	8	D	O
ATOM	11311	N	GLY	D	283	-5.316	-20.776	-32.317	1.00	36.73	7	D	N
ATOM	11312	CA	GLY	D	283	-6.192	-20.384	-31.190	1.00	31.32	6	D	C
ATOM	11313	C	GLY	D	283	-7.230	-19.386	-31.730	1.00	29.16	6	D	C
ATOM	11314	O	GLY	D	283	-7.659	-19.667	-32.871	1.00	27.79	8	D	O
ATOM	11315	N	TYR	D	284	-7.817	-18.494	-30.917	1.00	25.98	7	D	N
ATOM	11316	CA	TYR	D	284	-8.901	-17.680	-31.459	1.00	24.57	6	D	C
ATOM	11317	C	TYR	D	284	-8.459	-16.571	-32.404	1.00	25.70	6	D	C
ATOM	11318	O	TYR	D	284	-7.382	-16.005	-32.235	1.00	24.65	8	D	O
ATOM	11319	CB	TYR	D	284	-9.801	-17.026	-30.404	1.00	23.95	6	D	C
ATOM	11320	CG	TYR	D	284	-10.536	-18.050	-29.577	1.00	21.73	6	D	C
ATOM	11321	CD1	TYR	D	284	-9.952	-18.674	-28.477	1.00	22.56	6	D	C
ATOM	11322	CD2	TYR	D	284	-11.790	-18.461	-29.993	1.00	22.31	6	D	C
ATOM	11323	CE1	TYR	D	284	-10.631	-19.683	-27.792	1.00	21.13	6	D	C
ATOM	11324	CE2	TYR	D	284	-12.454	-19.456	-29.308	1.00	21.81	6	D	C
ATOM	11325	CZ	TYR	D	284	-11.880	-20.045	-28.225	1.00	21.29	6	D	C
ATOM	11326	OH	TYR	D	284	-12.596	-21.011	-27.559	1.00	25.50	8	D	O
ATOM	11327	N	THR	D	285	-9.297	-16.297	-33.421	1.00	23.56	7	D	N
ATOM	11328	CA	THR	D	285	-9.001	-15.085	-34.220	1.00	25.13	6	D	C
ATOM	11329	C	THR	D	285	-10.329	-14.475	-34.644	1.00	23.75	6	D	C
ATOM	11330	O	THR	D	285	-11.355	-14.844	-34.042	1.00	22.69	8	D	O
ATOM	11331	CB	THR	D	285	-8.092	-15.455	-35.391	1.00	26.80	6	D	C
ATOM	11332	OG1	THR	D	285	-7.825	-14.240	-36.104	1.00	31.01	8	D	O
ATOM	11333	CG2	THR	D	285	-8.732	-16.467	-36.319	1.00	24.28	6	D	C
ATOM	11334	N	ARG	D	286	-10.383	-13.606	-35.641	1.00	23.10	7	D	N
ATOM	11335	CA	ARG	D	286	-11.664	-13.061	-36.097	1.00	23.98	6	D	C
ATOM	11336	C	ARG	D	286	-11.661	-13.118	-37.631	1.00	25.24	6	D	C
ATOM	11337	O	ARG	D	286	-10.570	-13.047	-38.203	1.00	25.48	8	D	O
ATOM	11338	CB	ARG	D	286	-11.898	-11.638	-35.608	1.00	23.74	6	D	C
ATOM	11339	CG	ARG	D	286	-11.731	-11.487	-34.092	1.00	25.48	6	D	C
ATOM	11340	CD	ARG	D	286	-12.973	-12.038	-33.380	1.00	25.43	6	D	C
ATOM	11341	NE	ARG	D	286	-12.978	-11.653	-31.965	1.00	25.47	7	D	N
ATOM	11342	CZ	ARG	D	286	-12.229	-12.291	-31.054	1.00	24.33	6	D	C
ATOM	11343	NH1	ARG	D	286	-11.474	-13.317	-31.471	1.00	23.94	7	D	N
ATOM	11344	NH2	ARG	D	286	-12.195	-11.866	-29.796	1.00	20.44	7	D	N
ATOM	11345	N	ARG	D	287	-12.804	-13.306	-38.248	1.00	24.53	7	D	N
ATOM	11346	CA	ARG	D	287	-12.902	-13.412	-39.700	1.00	24.33	6	D	C
ATOM	11347	C	ARG	D	287	-12.560	-12.091	-40.394	1.00	24.07	6	D	C
ATOM	11348	O	ARG	D	287	-11.845	-12.091	-41.409	1.00	23.43	8	D	O
ATOM	11349	CB	ARG	D	287	-14.310	-13.839	-40.170	1.00	25.54	6	D	C
ATOM	11350	CG	ARG	D	287	-14.267	-14.232	-41.643	0.50	26.53	6	D	C
ATOM	11351	CG	BARG	D	287	-14.414	-14.339	-41.593	0.50	26.69	6	D	C
ATOM	11352	CD	AARG	D	287	-15.534	-14.872	-42.155	0.50	28.62	6	D	C
ATOM	11353	CD	BARG	D	287	-15.822	-14.680	-42.018	0.50	28.74	6	D	C
ATOM	11354	NE	AARG	D	287	-16.582	-13.920	-42.406	0.50	29.72	7	D	N
ATOM	11355	NE	BARG	D	287	-16.490	-15.760	-41.343	0.50	30.11	7	D	N
ATOM	11356	CZ	AARG	D	287	-16.683	-12.972	-43.308	0.50	30.66	6	D	C
ATOM	11357	CZ	BARG	D	287	-16.306	-17.061	-41.241	0.50	31.19	6	D	C
ATOM	11358	NH1AARG	D	287	-17.776	-12.211	-43.325	0.50	30.80	7	D	N	
ATOM	11359	NH1BARG	D	287	-17.142	-17.820	-40.525	0.50	30.41	7	D	N	
ATOM	11360	NH2AARG	D	287	-15.749	-12.725	-44.215	0.50	32.66	7	D	N	
ATOM	11361	NH2BARG	D	287	-15.285	-17.664	-41.848	0.50	32.05	7	D	N	
ATOM	11362	N	THR	D	288	-13.027	-10.993	-39.833	1.00	22.84	7	D	N
ATOM	11363	CA	THR	D	288	-12.762	-9.643	-40.379	1.00	23.37	6	D	C
ATOM	11364	C	THR	D	288	-12.295	-8.723	-39.264	1.00	22.78	6	D	C
ATOM	11365	O	THR	D	288	-12.219	-9.177	-38.116	1.00	26.16	8	D	O
ATOM	11366	CB	THR	D	288	-14.083	-9.123	-40.977	1.00	22.48	6	D	C
ATOM	11367	OG1	THR	D	288	-15.139	-9.286	-40.007	1.00	22.98	8	D	O
ATOM	11368	CG2	THR	D	288	-14.526	-9.993	-42.196	1.00	21.34	6	D	C
ATOM	11369	N	ASN	D	289	-11.943	-7.475	-39.515	1.00	21.78	7	D	N

145/188

ATOM	11370	CA	ASN	D	289	-11.501	-6.546	-38.470	1.00	21.39	6	D	C
ATOM	11371	C	ASN	D	289	-12.203	-5.200	-38.557	1.00	21.61	6	D	C
ATOM	11372	O	ASN	D	289	-11.589	-4.140	-38.451	1.00	21.55	8	D	O
ATOM	11373	CB	ASN	D	289	-9.982	-6.435	-38.504	1.00	21.34	6	D	C
ATOM	11374	CG	ASN	D	289	-9.422	-5.721	-37.251	1.00	21.22	6	D	C
ATOM	11375	OD1	ASN	D	289	-10.045	-5.761	-36.203	1.00	18.31	8	D	O
ATOM	11376	ND2	ASN	D	289	-8.272	-5.106	-37.443	1.00	18.63	7	D	N
ATOM	11377	N	ASN	D	290	-13.535	-5.212	-38.705	1.00	19.85	7	D	N
ATOM	11378	CA	ASN	D	290	-14.370	-4.042	-38.723	1.00	19.87	6	D	C
ATOM	11379	C	ASN	D	290	-14.318	-3.318	-37.357	1.00	19.75	6	D	C
ATOM	11380	O	ASN	D	290	-14.399	-2.091	-37.394	1.00	22.69	8	D	O
ATOM	11381	CB	ASN	D	290	-15.867	-4.401	-38.949	1.00	18.15	6	D	C
ATOM	11382	CG	ASN	D	290	-16.024	-5.030	-40.338	1.00	21.89	6	D	C
ATOM	11383	OD1	ASN	D	290	-15.450	-4.503	-41.285	1.00	18.59	8	D	O
ATOM	11384	ND2	ASN	D	290	-16.787	-6.114	-40.424	1.00	23.20	7	D	N
ATOM	11385	N	LEU	D	291	-14.023	-3.994	-36.270	1.00	18.58	7	D	N
ATOM	11386	CA	LEU	D	291	-14.003	-3.310	-34.955	1.00	18.34	6	D	C
ATOM	11387	C	LEU	D	291	-12.627	-2.729	-34.620	1.00	16.78	6	D	C
ATOM	11388	O	LEU	D	291	-12.445	-2.087	-33.586	1.00	18.73	8	D	O
ATOM	11389	CB	LEU	D	291	-14.478	-4.238	-33.851	1.00	17.97	6	D	C
ATOM	11390	CG	LEU	D	291	-15.890	-4.802	-33.953	1.00	17.24	6	D	C
ATOM	11391	CD1	LEU	D	291	-16.155	-5.896	-32.925	1.00	16.75	6	D	C
ATOM	11392	CD2	LEU	D	291	-16.962	-3.727	-33.813	1.00	15.72	6	D	C
ATOM	11393	N	GLY	D	292	-11.689	-2.946	-35.507	1.00	14.88	7	D	N
ATOM	11394	CA	GLY	D	292	-10.349	-2.379	-35.401	1.00	15.64	6	D	C
ATOM	11395	C	GLY	D	292	-9.610	-2.802	-34.141	1.00	16.50	6	D	C
ATOM	11396	O	GLY	D	292	-8.800	-2.032	-33.596	1.00	15.08	8	D	O
ATOM	11397	N	GLY	D	293	-9.663	-4.068	-33.760	1.00	14.28	7	D	N
ATOM	11398	CA	GLY	D	293	-8.881	-4.556	-32.644	1.00	17.13	6	D	C
ATOM	11399	C	GLY	D	293	-9.466	-4.424	-31.249	1.00	17.99	6	D	C
ATOM	11400	O	GLY	D	293	-8.855	-4.816	-30.237	1.00	19.98	8	D	O
ATOM	11401	N	PHE	D	294	-10.718	-4.034	-31.126	1.00	18.26	7	D	N
ATOM	11402	CA	PHE	D	294	-11.300	-3.843	-29.810	1.00	19.55	6	D	C
ATOM	11403	C	PHE	D	294	-12.683	-4.450	-29.671	1.00	19.82	6	D	C
ATOM	11404	O	PHE	D	294	-13.516	-4.144	-30.522	1.00	18.20	8	D	O
ATOM	11405	CB	PHE	D	294	-11.488	-2.307	-29.592	1.00	19.84	6	D	C
ATOM	11406	CG	PHE	D	294	-10.173	-1.672	-29.276	1.00	20.00	6	D	C
ATOM	11407	CD1	PHE	D	294	-9.459	-0.995	-30.267	1.00	21.39	6	D	C
ATOM	11408	CD2	PHE	D	294	-9.602	-1.838	-28.019	1.00	20.75	6	D	C
ATOM	11409	CE1	PHE	D	294	-8.231	-0.417	-29.978	1.00	18.15	6	D	C
ATOM	11410	CE2	PHE	D	294	-8.355	-1.290	-27.765	1.00	21.25	6	D	C
ATOM	11411	CZ	PHE	D	294	-7.681	-0.605	-28.743	1.00	18.78	6	D	C
ATOM	11412	N	GLU	D	295	-12.889	-5.108	-28.550	1.00	18.58	7	D	N
ATOM	11413	CA	GLU	D	295	-14.183	-5.604	-28.140	1.00	19.75	6	D	C
ATOM	11414	C	GLU	D	295	-14.366	-5.226	-26.656	1.00	19.89	6	D	C
ATOM	11415	O	GLU	D	295	-13.477	-5.568	-25.853	1.00	17.17	8	D	O
ATOM	11416	CB	GLU	D	295	-14.278	-7.124	-28.276	1.00	21.05	6	D	C
ATOM	11417	CG	GLU	D	295	-14.245	-7.528	-29.757	1.00	22.85	6	D	C
ATOM	11418	CD	GLU	D	295	-13.970	-8.974	-30.046	1.00	22.58	6	D	C
ATOM	11419	OE1	GLU	D	295	-13.738	-9.767	-29.139	1.00	21.07	8	D	O
ATOM	11420	OE2	GLU	D	295	-13.887	-9.303	-31.270	1.00	23.96	8	D	O
ATOM	11421	N	GLY	D	296	-15.397	-4.439	-26.333	1.00	19.34	7	D	N
ATOM	11422	CA	GLY	D	296	-15.596	-4.112	-24.912	1.00	18.47	6	D	C
ATOM	11423	C	GLY	D	296	-14.458	-3.276	-24.313	1.00	18.96	6	D	C
ATOM	11424	O	GLY	D	296	-14.212	-3.330	-23.107	1.00	18.75	8	D	O
ATOM	11425	N	GLY	D	297	-13.776	-2.448	-25.061	1.00	19.99	7	D	N
ATOM	11426	CA	GLY	D	297	-12.704	-1.593	-24.534	1.00	19.93	6	D	C
ATOM	11427	C	GLY	D	297	-11.416	-2.423	-24.368	1.00	18.56	6	D	C
ATOM	11428	O	GLY	D	297	-10.434	-1.917	-23.830	1.00	17.59	8	D	O
ATOM	11429	N	MET	D	298	-11.446	-3.666	-24.870	1.00	17.29	7	D	N
ATOM	11430	CA	MET	D	298	-10.265	-4.539	-24.742	1.00	16.47	6	D	C
ATOM	11431	C	MET	D	298	-9.673	-4.999	-26.067	1.00	17.30	6	D	C
ATOM	11432	O	MET	D	298	-10.415	-5.125	-27.029	1.00	17.69	8	D	O
ATOM	11433	CB	MET	D	298	-10.596	-5.766	-23.898	1.00	13.05	6	D	C
ATOM	11434	CG	MET	D	298	-11.292	-5.510	-22.560	1.00	14.39	6	D	C
ATOM	11435	SE	MET	D	298	-11.870	-7.170	-21.724	1.00	38.45	34	D	SE
ATOM	11436	CE2	MET	D	298	-13.348	-7.677	-22.977	1.00	10.95	6	D	C
ATOM	11437	N	THR	D	299	-8.373	-5.236	-26.183	1.00	19.88	7	D	N
ATOM	11438	CA	THR	D	299	-7.753	-5.708	-27.427	1.00	17.19	6	D	C
ATOM	11439	C	THR	D	299	-8.200	-7.149	-27.682	1.00	19.36	6	D	C
ATOM	11440	O	THR	D	299	-8.100	-7.950	-26.741	1.00	18.12	8	D	O
ATOM	11441	CB	THR	D	299	-6.232	-5.672	-27.353	1.00	19.01	6	D	C
ATOM	11442	OG1	THR	D	299	-5.830	-6.382	-26.165	1.00	15.00	8	D	O
ATOM	11443	CG2	THR	D	299	-5.651	-4.249	-27.303	1.00	16.83	6	D	C
ATOM	11444	N	ASN	D	300	-8.688	-7.448	-28.895	1.00	18.23	7	D	N
ATOM	11445	CA	ASN	D	300	-9.090	-8.845	-29.190	1.00	18.61	6	D	C
ATOM	11446	C	ASN	D	300	-7.977	-9.578	-29.925	1.00	19.76	6	D	C
ATOM	11447	O	ASN	D	300	-8.149	-10.743	-30.279	1.00	19.73	8	D	O
ATOM	11448	CB	ASN	D	300	-10.416	-8.823	-29.996	1.00	17.93	6	D	C

146/188

ATOM	11449	CG	ASN	D	300	-10.261	-8.108	-31.319	1.00	19.00	6	D	C
ATOM	11450	OD1	ASN	D	300	-9.168	-7.691	-31.743	1.00	18.22	8	D	O
ATOM	11451	ND2	ASN	D	300	-11.387	-8.014	-32.039	1.00	18.38	7	D	N
ATOM	11452	N	GLY	D	301	-6.812	-8.974	-30.145	1.00	20.10	7	D	N
ATOM	11453	CA	GLY	D	301	-5.758	-9.724	-30.860	1.00	21.04	6	D	C
ATOM	11454	C	GLY	D	301	-5.671	-9.418	-32.355	1.00	22.32	6	D	C
ATOM	11455	O	GLY	D	301	-4.601	-9.684	-32.913	1.00	19.51	8	D	O
ATOM	11456	N	GLN	D	302	-6.719	-8.850	-32.973	1.00	21.18	7	D	N
ATOM	11457	CA	GLN	D	302	-6.572	-8.413	-34.363	1.00	22.14	6	D	C
ATOM	11458	C	GLN	D	302	-5.733	-7.134	-34.331	1.00	22.58	6	D	C
ATOM	11459	O	GLN	D	302	-5.533	-6.554	-33.272	1.00	21.57	8	D	O
ATOM	11460	CB	GLN	D	302	-7.954	-8.110	-34.968	1.00	21.66	6	D	C
ATOM	11461	CG	GLN	D	302	-8.821	-9.375	-35.006	1.00	21.50	6	D	C
ATOM	11462	CD	GLN	D	302	-8.185	-10.376	-35.973	1.00	24.60	6	D	C
ATOM	11463	OE1	GLN	D	302	-7.941	-9.992	-37.122	1.00	26.03	8	D	O
ATOM	11464	NE2	GLN	D	302	-7.888	-11.583	-35.510	1.00	25.13	7	D	N
ATOM	11465	N	PRO	D	303	-5.361	-6.591	-35.477	1.00	22.30	7	D	N
ATOM	11466	CA	PRO	D	303	-4.603	-5.365	-35.491	1.00	22.52	6	D	C
ATOM	11467	C	PRO	D	303	-5.469	-4.224	-34.942	1.00	21.65	6	D	C
ATOM	11468	O	PRO	D	303	-6.657	-4.158	-35.242	1.00	18.99	8	D	O
ATOM	11469	CB	PRO	D	303	-4.284	-5.169	-36.967	1.00	23.98	6	D	C
ATOM	11470	CG	PRO	D	303	-4.257	-6.596	-37.493	1.00	24.16	6	D	C
ATOM	11471	CD	PRO	D	303	-5.493	-7.209	-36.821	1.00	22.42	6	D	C
ATOM	11472	N	ILE	D	304	-4.844	-3.342	-34.182	1.00	19.52	7	D	N
ATOM	11473	CA	ILE	D	304	-5.525	-2.140	-33.712	1.00	21.27	6	D	C
ATOM	11474	C	ILE	D	304	-5.549	-1.212	-34.931	1.00	21.71	6	D	C
ATOM	11475	O	ILE	D	304	-4.478	-1.047	-35.519	1.00	20.91	8	D	O
ATOM	11476	CB	ILE	D	304	-4.804	-1.407	-32.565	1.00	20.46	6	D	C
ATOM	11477	CG1	ILE	D	304	-5.034	-2.145	-31.251	1.00	20.67	6	D	C
ATOM	11478	CG2	ILE	D	304	-5.223	0.050	-32.440	1.00	18.87	6	D	C
ATOM	11479	CD1	ILE	D	304	-4.145	-1.860	-30.068	1.00	19.49	6	D	C
ATOM	11480	N	VAL	D	305	-6.706	-0.672	-35.286	1.00	21.78	7	D	N
ATOM	11481	CA	VAL	D	305	-6.738	0.251	-36.433	1.00	21.09	6	D	C
ATOM	11482	C	VAL	D	305	-7.439	1.511	-35.948	1.00	20.86	6	D	C
ATOM	11483	O	VAL	D	305	-8.629	1.464	-35.630	1.00	20.54	8	D	O
ATOM	11484	CB	VAL	D	305	-7.531	-0.366	-37.591	1.00	23.27	6	D	C
ATOM	11485	CG1	VAL	D	305	-7.508	0.513	-38.855	1.00	20.55	6	D	C
ATOM	11486	CG2	VAL	D	305	-7.026	-1.768	-37.916	1.00	22.30	6	D	C
ATOM	11487	N	VAL	D	306	-6.722	2.613	-35.886	1.00	20.50	7	D	N
ATOM	11488	CA	VAL	D	306	-7.296	3.866	-35.421	1.00	19.95	6	D	C
ATOM	11489	C	VAL	D	306	-6.971	4.965	-36.409	1.00	19.71	6	D	C
ATOM	11490	O	VAL	D	306	-5.862	4.983	-36.997	1.00	19.89	8	D	O
ATOM	11491	CB	VAL	D	306	-6.859	4.176	-33.972	1.00	20.99	6	D	C
ATOM	11492	CG1	VAL	D	306	-5.336	4.133	-33.894	1.00	21.19	6	D	C
ATOM	11493	CG2	VAL	D	306	-7.303	5.522	-33.410	1.00	21.12	6	D	C
ATOM	11494	N	ARG	D	307	-7.923	5.886	-36.571	1.00	19.99	7	D	N
ATOM	11495	CA	ARG	D	307	-7.658	6.998	-37.507	1.00	21.58	6	D	C
ATOM	11496	C	ARG	D	307	-7.923	8.297	-36.745	1.00	21.28	6	D	C
ATOM	11497	O	ARG	D	307	-8.777	8.281	-35.834	1.00	20.60	8	D	O
ATOM	11498	CB	ARG	D	307	-8.513	6.985	-38.781	1.00	23.97	6	D	C
ATOM	11499	CG	ARG	D	307	-8.359	5.733	-39.633	1.00	27.06	6	D	C
ATOM	11500	CD	ARG	D	307	-9.147	5.695	-40.943	1.00	28.03	6	D	C
ATOM	11501	NE	ARG	D	307	-10.543	5.395	-40.621	1.00	32.15	7	D	N
ATOM	11502	CZ	ARG	D	307	-10.942	4.123	-40.539	1.00	32.10	6	D	C
ATOM	11503	NH1	ARG	D	307	-10.094	3.147	-40.794	1.00	32.29	7	D	N
ATOM	11504	NH2	ARG	D	307	-12.193	3.914	-40.212	1.00	33.29	7	D	N
ATOM	11505	N	GLY	D	308	-7.189	9.327	-37.160	1.00	19.03	7	D	N
ATOM	11506	CA	GLY	D	308	-7.441	10.619	-36.507	1.00	18.27	6	D	C
ATOM	11507	C	GLY	D	308	-7.579	11.641	-37.646	1.00	20.21	6	D	C
ATOM	11508	O	GLY	D	308	-6.833	11.525	-38.630	1.00	20.38	8	D	O
ATOM	11509	N	VAL	D	309	-8.451	12.631	-37.470	1.00	17.84	7	D	N
ATOM	11510	CA	VAL	D	309	-8.516	13.662	-38.511	1.00	17.90	6	D	C
ATOM	11511	C	VAL	D	309	-7.773	14.908	-38.033	1.00	18.99	6	D	C
ATOM	11512	O	VAL	D	309	-7.925	15.392	-36.896	1.00	18.83	8	D	O
ATOM	11513	CB	VAL	D	309	-9.967	14.011	-38.864	1.00	15.89	6	D	C
ATOM	11514	CG1	VAL	D	309	-10.792	14.255	-37.601	1.00	15.36	6	D	C
ATOM	11515	CG2	VAL	D	309	-9.964	15.305	-39.715	1.00	19.13	6	D	C
ATOM	11516	N	MET	D	310	-6.896	15.412	-38.888	1.00	17.83	7	D	N
ATOM	11517	CA	MET	D	310	-6.174	16.635	-38.583	1.00	20.12	6	D	C
ATOM	11518	C	MET	D	310	-6.799	17.765	-39.424	1.00	22.24	6	D	C
ATOM	11519	O	MET	D	310	-6.985	17.578	-40.632	1.00	21.00	8	D	O
ATOM	11520	CB	MET	D	310	-4.687	16.594	-38.861	1.00	19.52	6	D	C
ATOM	11521	CG	MET	D	310	-3.999	17.875	-38.404	1.00	19.22	6	D	C
ATOM	11522	SE	MET	D	310	-2.295	17.823	-39.541	1.00	39.60	34	D	SE
ATOM	11523	CE2	MET	D	310	-1.426	19.049	-38.658	1.00	15.53	6	D	C
ATOM	11524	N	LYS	D	311	-7.249	18.817	-38.764	1.00	21.97	7	D	N
ATOM	11525	CA	LYS	D	311	-7.827	19.939	-39.508	1.00	20.87	6	D	C
ATOM	11526	C	LYS	D	311	-6.673	20.631	-40.232	1.00	22.55	6	D	C
ATOM	11527	O	LYS	D	311	-5.515	20.525	-39.805	1.00	25.11	8	D	O

147/188

ATOM	11528	CB	LYS	D	311	-8.517	20.897	-38.546	1.00	19.02	6	D	C
ATOM	11529	CG	LYS	D	311	-7.591	21.846	-37.807	1.00	18.39	6	D	C
ATOM	11530	CD	LYS	D	311	-8.336	22.457	-36.579	1.00	19.86	6	D	C
ATOM	11531	CE	LYS	D	311	-7.584	23.754	-36.245	1.00	21.35	6	D	C
ATOM	11532	NZ	LYS	D	311	-7.894	24.284	-34.880	1.00	23.65	7	D	N
ATOM	11533	N	PRO	D	312	-6.943	21.482	-41.212	1.00	23.13	7	D	N
ATOM	11534	CA	PRO	D	312	-5.893	22.239	-41.879	1.00	23.45	6	D	C
ATOM	11535	C	PRO	D	312	-5.167	23.127	-40.878	1.00	24.70	6	D	C
ATOM	11536	O	PRO	D	312	-5.708	23.617	-39.871	1.00	21.94	8	D	O
ATOM	11537	CB	PRO	D	312	-6.634	23.068	-42.924	1.00	23.75	6	D	C
ATOM	11538	CG	PRO	D	312	-7.979	22.420	-43.098	1.00	24.34	6	D	C
ATOM	11539	CD	PRO	D	312	-8.280	21.697	-41.811	1.00	24.43	6	D	C
ATOM	11540	N	ILE	D	313	-3.890	23.359	-41.088	1.00	24.45	7	D	N
ATOM	11541	CA	ILE	D	313	-3.113	24.286	-40.267	1.00	27.39	6	D	C
ATOM	11542	C	ILE	D	313	-3.858	25.618	-40.204	1.00	26.61	6	D	C
ATOM	11543	O	ILE	D	313	-4.251	26.149	-41.228	1.00	26.24	8	D	O
ATOM	11544	CB	ILE	D	313	-1.748	24.493	-40.982	1.00	28.88	6	D	C
ATOM	11545	CG1	ILE	D	313	-0.844	23.275	-40.706	1.00	28.81	6	D	C
ATOM	11546	CG2	ILE	D	313	-1.070	25.789	-40.581	1.00	28.96	6	D	C
ATOM	11547	CD1	ILE	D	313	0.400	23.348	-41.587	1.00	31.55	6	D	C
ATOM	11548	N	PRO	D	314	-3.973	26.240	-39.048	1.00	27.74	7	D	N
ATOM	11549	CA	PRO	D	314	-4.737	27.470	-38.916	1.00	30.57	6	D	C
ATOM	11550	C	PRO	D	314	-4.067	28.668	-39.571	1.00	32.50	6	D	C
ATOM	11551	O	PRO	D	314	-4.703	29.561	-40.109	1.00	32.54	8	D	O
ATOM	11552	CB	PRO	D	314	-4.883	27.661	-37.426	1.00	29.51	6	D	C
ATOM	11553	CG	PRO	D	314	-4.574	26.349	-36.802	1.00	29.07	6	D	C
ATOM	11554	CD	PRO	D	314	-3.628	25.630	-37.736	1.00	27.89	6	D	C
ATOM	11555	N	THR	D	315	-2.759	28.756	-39.488	1.00	36.21	7	D	N
ATOM	11556	CA	THR	D	315	-2.031	29.903	-40.004	1.00	39.45	6	D	C
ATOM	11557	C	THR	D	315	-2.167	29.972	-41.520	1.00	40.26	6	D	C
ATOM	11558	O	THR	D	315	-1.646	29.086	-42.185	1.00	41.46	8	D	O
ATOM	11559	CB	THR	D	315	-0.543	29.905	-39.660	1.00	39.44	6	D	C
ATOM	11560	OG1	THR	D	315	-0.433	29.862	-38.234	1.00	39.98	8	D	O
ATOM	11561	CG2	THR	D	315	0.086	31.208	-40.176	1.00	39.98	6	D	C
ATOM	11562	N	LEU	D	316	-2.821	31.009	-42.010	1.00	40.65	7	D	N
ATOM	11563	CA	LEU	D	316	-2.923	31.228	-43.452	1.00	42.25	6	D	C
ATOM	11564	C	LEU	D	316	-2.040	32.418	-43.844	1.00	45.59	6	D	C
ATOM	11565	O	LEU	D	316	-2.003	33.457	-43.179	1.00	42.83	8	D	O
ATOM	11566	CB	LEU	D	316	-4.353	31.469	-43.888	1.00	41.66	6	D	C
ATOM	11567	CG	LEU	D	316	-5.443	30.448	-43.581	1.00	41.44	6	D	C
ATOM	11568	CD1	LEU	D	316	-6.707	30.750	-44.402	1.00	41.71	6	D	C
ATOM	11569	CD2	LEU	D	316	-5.019	29.023	-43.853	1.00	39.99	6	D	C
ATOM	11570	N	TYR	D	317	-1.249	32.238	-44.903	1.00	49.68	7	D	N
ATOM	11571	CA	TYR	D	317	-0.373	33.344	-45.346	1.00	53.58	6	D	C
ATOM	11572	C	TYR	D	317	-1.295	34.420	-45.924	1.00	53.61	6	D	C
ATOM	11573	O	TYR	D	317	-0.956	35.591	-46.056	1.00	54.79	8	D	O
ATOM	11574	CB	TYR	D	317	0.710	32.864	-46.276	1.00	56.94	6	D	C
ATOM	11575	CG	TYR	D	317	2.028	32.391	-45.713	1.00	60.33	6	D	C
ATOM	11576	CD1	TYR	D	317	2.108	31.273	-44.899	1.00	61.91	6	D	C
ATOM	11577	CD2	TYR	D	317	3.221	33.054	-46.032	1.00	61.45	6	D	C
ATOM	11578	CE1	TYR	D	317	3.325	30.827	-44.402	1.00	63.18	6	D	C
ATOM	11579	CE2	TYR	D	317	4.440	32.629	-45.540	1.00	62.45	6	D	C
ATOM	11580	CZ	TYR	D	317	4.475	31.514	-44.726	1.00	63.66	6	D	C
ATOM	11581	OH	TYR	D	317	5.667	31.062	-44.208	1.00	65.55	8	D	O
ATOM	11582	N	LYS	D	318	-2.511	34.047	-46.247	1.00	52.51	7	D	N
ATOM	11583	CA	LYS	D	318	-3.661	34.885	-46.615	1.00	51.62	6	D	C
ATOM	11584	C	LYS	D	318	-4.513	34.946	-45.346	1.00	51.29	6	D	C
ATOM	11585	O	LYS	D	318	-5.412	34.109	-45.158	1.00	50.39	8	D	O
ATOM	11586	CB	LYS	D	318	-4.377	34.050	-47.678	1.00	52.66	6	D	C
ATOM	11587	CG	LYS	D	318	-5.876	34.186	-47.846	1.00	54.10	6	D	C
ATOM	11588	CD	LYS	D	318	-6.569	32.850	-48.053	1.00	55.43	6	D	C
ATOM	11589	CE	LYS	D	318	-6.369	32.336	-49.468	1.00	55.05	6	D	C
ATOM	11590	NZ	LYS	D	318	-7.433	31.384	-49.893	1.00	55.83	7	D	N
ATOM	11591	N	PRO	D	319	-4.211	35.809	-44.390	1.00	51.25	7	D	N
ATOM	11592	CA	PRO	D	319	-4.803	35.795	-43.053	1.00	50.51	6	D	C
ATOM	11593	C	PRO	D	319	-6.187	35.286	-42.797	1.00	49.66	6	D	C
ATOM	11594	O	PRO	D	319	-6.385	34.057	-42.850	1.00	50.11	8	D	O
ATOM	11595	CB	PRO	D	319	-4.449	37.149	-42.454	1.00	50.04	6	D	C
ATOM	11596	CG	PRO	D	319	-3.157	37.491	-43.108	1.00	50.00	6	D	C
ATOM	11597	CD	PRO	D	319	-3.135	36.843	-44.467	1.00	50.30	6	D	C
ATOM	11598	N	LEU	D	320	-7.176	36.063	-42.432	1.00	47.84	7	D	N
ATOM	11599	CA	LEU	D	320	-8.556	35.741	-42.078	1.00	41.08	6	D	C
ATOM	11600	C	LEU	D	320	-8.941	36.897	-41.135	1.00	37.27	6	D	C
ATOM	11601	O	LEU	D	320	-7.965	37.460	-40.647	1.00	34.86	8	D	O
ATOM	11602	CB	LEU	D	320	-8.780	34.422	-41.365	1.00	39.56	6	D	C
ATOM	11603	CG	LEU	D	320	-8.869	33.123	-42.182	1.00	39.60	6	D	C
ATOM	11604	CD1	LEU	D	320	-8.983	31.906	-41.291	1.00	38.22	6	D	C
ATOM	11605	CD2	LEU	D	320	-9.976	33.146	-43.209	1.00	39.85	6	D	C
ATOM	11606	N	MET	D	321	-10.189	37.224	-40.879	1.00	35.35	7	D	N

148/188

ATOM	11607	CA	MET	D	321	-10.447	38.352	-39.974	1.00	33.15	6	D	C
ATOM	11608	C	MET	D	321	-10.279	37.979	-38.502	1.00	31.27	6	D	C
ATOM	11609	O	MET	D	321	-10.684	36.929	-38.032	1.00	30.27	8	D	O
ATOM	11610	CB	MET	D	321	-11.853	38.911	-40.148	1.00	33.28	6	D	C
ATOM	11611	CG	MET	D	321	-12.154	39.391	-41.570	1.00	34.97	6	D	C
ATOM	11612	SE	MET	D	321	-10.912	40.966	-41.692	1.00	83.01	34	D	SE
ATOM	11613	CE2	MET	D	321	-10.999	41.956	-39.983	1.00	26.97	6	D	C
ATOM	11614	N	SER	D	322	-9.737	38.915	-37.758	1.00	29.53	7	D	N
ATOM	11615	CA	SER	D	322	-9.568	38.801	-36.316	1.00	28.09	6	D	C
ATOM	11616	C	SER	D	322	-9.805	40.152	-35.653	1.00	27.81	6	D	C
ATOM	11617	O	SER	D	322	-10.409	41.049	-36.270	1.00	28.11	8	D	O
ATOM	11618	CB	SER	D	322	-8.153	38.326	-36.007	1.00	26.90	6	D	C
ATOM	11619	OG	SER	D	322	-8.053	37.914	-34.654	1.00	26.15	8	D	O
ATOM	11620	N	VAL	D	323	-9.349	40.269	-34.414	1.00	26.32	7	D	N
ATOM	11621	CA	VAL	D	323	-9.462	41.511	-33.668	1.00	28.10	6	D	C
ATOM	11622	C	VAL	D	323	-8.159	41.791	-32.927	1.00	29.71	6	D	C
ATOM	11623	O	VAL	D	323	-7.527	40.856	-32.423	1.00	30.39	8	D	O
ATOM	11624	CB	VAL	D	323	-10.627	41.420	-32.663	1.00	25.89	6	D	C
ATOM	11625	CG1	VAL	D	323	-10.768	42.677	-31.812	1.00	24.84	6	D	C
ATOM	11626	CG2	VAL	D	323	-11.891	41.066	-33.387	1.00	26.70	6	D	C
ATOM	11627	N	ASP	D	324	-7.745	43.046	-32.883	1.00	29.87	7	D	N
ATOM	11628	CA	ASP	D	324	-6.590	43.569	-32.210	1.00	32.62	6	D	C
ATOM	11629	C	ASP	D	324	-6.990	43.682	-30.716	1.00	32.53	6	D	C
ATOM	11629	O	ASP	D	324	-7.905	44.464	-30.402	1.00	29.65	8	D	O
ATOM	11630	O	ASP	D	324	-6.207	44.940	-32.757	1.00	35.34	6	D	C
ATOM	11631	CB	ASP	D	324	-5.000	45.617	-32.173	1.00	38.29	6	D	C
ATOM	11632	CG	ASP	D	324	-4.192	46.123	-32.991	1.00	40.08	8	D	O
ATOM	11633	OD1	ASP	D	324	-4.822	45.697	-30.944	1.00	38.42	8	D	O
ATOM	11634	OD2	ASP	D	324	-6.265	42.898	-29.911	1.00	31.42	7	D	N
ATOM	11635	N	ILE	D	325	-6.648	42.796	-28.513	1.00	32.03	6	D	C
ATOM	11636	CA	ILE	D	325	-6.448	44.093	-27.756	1.00	31.86	6	D	C
ATOM	11637	C	ILE	D	325	-7.146	44.248	-26.745	1.00	32.75	8	D	O
ATOM	11638	O	ILE	D	325	-6.003	41.586	-27.814	1.00	32.62	6	D	C
ATOM	11639	CB	ILE	D	325	-4.477	41.740	-27.662	1.00	33.54	6	D	C
ATOM	11640	CG1	ILE	D	325	-6.308	40.331	-28.611	1.00	32.26	6	D	C
ATOM	11641	CG2	ILE	D	325	-3.847	40.688	-26.758	1.00	33.27	6	D	C
ATOM	11642	CD1	ILE	D	325	-5.622	45.007	-28.254	1.00	32.05	7	D	N
ATOM	11643	N	GLU	D	326	-5.455	46.259	-27.527	1.00	34.07	6	D	C
ATOM	11644	CA	GLU	D	326	-6.448	47.324	-27.971	1.00	36.01	6	D	C
ATOM	11645	C	GLU	D	326	-6.738	48.220	-27.158	1.00	35.30	8	D	O
ATOM	11646	O	GLU	D	326	-4.067	46.876	-27.638	1.00	34.91	6	D	C
ATOM	11647	CB	GLU	D	326	-3.028	46.124	-26.800	1.00	36.27	6	D	C
ATOM	11648	CG	GLU	D	326	-1.621	46.577	-27.118	1.00	37.76	6	D	C
ATOM	11649	CD	GLU	D	326	-0.709	46.381	-26.277	1.00	38.47	8	D	O
ATOM	11650	OE1	GLU	D	326	-1.393	47.092	-28.237	1.00	40.86	8	D	O
ATOM	11651	OE2	GLU	D	326	-6.877	47.252	-29.233	1.00	33.36	7	D	N
ATOM	11652	N	THR	D	327	-7.813	48.318	-29.633	1.00	33.91	6	D	C
ATOM	11653	CA	THR	D	327	-9.244	47.822	-29.764	1.00	34.24	6	D	C
ATOM	11654	C	THR	D	327	-10.154	48.642	-29.839	1.00	33.43	8	D	O
ATOM	11655	O	THR	D	327	-7.427	48.886	-31.013	1.00	33.91	6	D	C
ATOM	11656	CB	THR	D	327	-7.505	47.766	-31.903	1.00	32.85	8	D	O
ATOM	11657	OG1	THR	D	327	-6.044	49.504	-31.037	1.00	35.23	6	D	C
ATOM	11658	CG2	THR	D	327	-9.433	46.504	-29.879	1.00	33.86	7	D	N
ATOM	11659	N	HIS	D	328	-10.734	45.937	-30.163	1.00	32.97	6	D	C
ATOM	11660	CA	HIS	D	328	-11.199	46.221	-31.592	1.00	33.08	6	D	C
ATOM	11661	C	HIS	D	328	-12.375	45.997	-31.920	1.00	32.84	8	D	O
ATOM	11662	O	HIS	D	328	-11.802	46.392	-29.178	1.00	34.59	6	D	C
ATOM	11663	CB	HIS	D	328	-11.649	45.692	-27.860	1.00	35.06	6	D	C
ATOM	11664	CG	HIS	D	328	-11.856	46.320	-26.667	1.00	36.29	7	D	N
ATOM	11665	ND1	HIS	D	328	-11.297	44.412	-27.586	1.00	34.64	6	D	C
ATOM	11666	CD2	HIS	D	328	-11.659	45.447	-25.683	1.00	37.36	6	D	C
ATOM	11667	CE1	HIS	D	328	-11.304	44.287	-26.225	1.00	35.36	7	D	N
ATOM	11668	NE2	HIS	D	328	-10.299	46.623	-32.469	1.00	34.16	7	D	N
ATOM	11669	N	GLU	D	329	-10.687	46.878	-33.867	1.00	35.77	6	D	C
ATOM	11670	CA	GLU	D	329	-10.394	45.634	-34.690	1.00	36.40	6	D	C
ATOM	11671	C	GLU	D	329	-9.424	44.922	-34.383	1.00	33.95	8	D	O
ATOM	11672	O	GLU	D	329	-9.900	48.069	-34.388	1.00	38.12	6	D	C
ATOM	11673	CB	GLU	D	329	-10.281	49.411	-33.792	1.00	40.67	6	D	C
ATOM	11674	CG	GLU	D	329	-11.638	49.865	-34.284	1.00	44.23	6	D	C
ATOM	11675	CD	GLU	D	329	-11.790	49.912	-35.527	1.00	46.20	8	D	O
ATOM	11676	OE1	GLU	D	329	-12.521	50.125	-33.441	1.00	44.95	8	D	O
ATOM	11677	OE2	GLU	D	329	-11.224	45.336	-35.684	1.00	36.01	7	D	N
ATOM	11678	N	PRO	D	330	-10.985	44.190	-36.547	1.00	36.73	6	D	C
ATOM	11679	CA	PRO	D	330	-9.700	44.428	-37.327	1.00	40.05	6	D	C
ATOM	11680	C	PRO	D	330	-9.290	45.573	-37.534	1.00	37.77	8	D	O
ATOM	11681	O	PRO	D	330	-12.203	44.084	-37.435	1.00	35.57	6	D	C
ATOM	11682	CB	PRO	D	330	-12.952	45.343	-37.273	1.00	34.25	6	D	C
ATOM	11683	CG	PRO	D	330	-12.355	46.146	-36.150	1.00	35.50	6	D	C
ATOM	11684	CD	PRO	D	330	-9.085	43.347	-37.749	1.00	44.60	7	D	N
ATOM	11685	N	TYR	D	331								

149/188

ATOM	11686	CA	TYR	D	331	-7.829	43.358	-38.470	1.00	51.48	6	D	C
ATOM	11687	C	TYR	D	331	-7.584	41.945	-38.998	1.00	52.93	6	D	C
ATOM	11688	O	TYR	D	331	-8.263	40.991	-38.595	1.00	54.08	8	D	O
ATOM	11689	CB	TYR	D	331	-6.770	43.612	-37.406	1.00	57.17	6	D	C
ATOM	11690	CG	TYR	D	331	-5.588	44.500	-37.617	1.00	62.39	6	D	C
ATOM	11691	CD1	TYR	D	331	-5.623	45.840	-37.232	1.00	64.69	6	D	C
ATOM	11692	CD2	TYR	D	331	-4.409	44.029	-38.183	1.00	63.98	6	D	C
ATOM	11693	CE1	TYR	D	331	-4.539	46.679	-37.415	1.00	66.24	6	D	C
ATOM	11694	CE2	TYR	D	331	-3.315	44.852	-38.371	1.00	65.86	6	D	C
ATOM	11695	CZ	TYR	D	331	-3.387	46.178	-37.986	1.00	67.09	6	D	C
ATOM	11696	OH	TYR	D	331	-2.293	47.007	-38.175	1.00	68.22	8	D	O
ATOM	11697	N	LYS	D	332	-6.598	41.813	-39.865	1.00	53.65	7	D	N
ATOM	11698	CA	LYS	D	332	-6.271	40.466	-40.369	1.00	53.99	6	D	C
ATOM	11699	C	LYS	D	332	-5.493	39.779	-39.247	1.00	53.02	6	D	C
ATOM	11700	O	LYS	D	332	-4.958	40.439	-38.334	1.00	50.40	8	D	O
ATOM	11701	CB	LYS	D	332	-5.559	40.612	-41.707	1.00	54.49	6	D	C
ATOM	11702	CG	LYS	D	332	-6.601	41.033	-42.750	1.00	57.57	6	D	C
ATOM	11703	CD	LYS	D	332	-6.051	41.354	-44.123	1.00	59.06	6	D	C
ATOM	11704	CE	LYS	D	332	-7.053	41.102	-45.240	1.00	59.15	6	D	C
ATOM	11705	NZ	LYS	D	332	-8.456	41.317	-44.825	1.00	60.70	7	D	N
ATOM	11706	N	ALA	D	333	-5.429	38.450	-39.286	1.00	52.27	7	D	N
ATOM	11707	CA	ALA	D	333	-4.670	37.730	-38.246	1.00	50.44	6	D	C
ATOM	11708	C	ALA	D	333	-3.160	37.906	-38.417	1.00	48.57	6	D	C
ATOM	11709	O	ALA	D	333	-2.691	38.282	-39.495	1.00	46.36	8	D	O
ATOM	11710	CB	ALA	D	333	-5.092	36.280	-38.285	1.00	50.49	6	D	C
ATOM	11711	N	THR	D	334	-2.385	37.718	-37.336	1.00	46.97	7	D	N
ATOM	11712	CA	THR	D	334	-0.926	37.852	-37.481	1.00	44.74	6	D	C
ATOM	11713	C	THR	D	334	-0.463	36.699	-38.379	1.00	44.92	6	D	C
ATOM	11714	O	THR	D	334	-1.123	35.643	-38.434	1.00	41.88	8	D	O
ATOM	11715	CB	THR	D	334	-0.124	37.871	-36.174	1.00	43.24	6	D	C
ATOM	11716	OG1	THR	D	334	1.283	37.913	-36.477	1.00	41.00	8	D	O
ATOM	11717	CG2	THR	D	334	-0.361	36.652	-35.304	1.00	41.46	6	D	C
ATOM	11718	N	VAL	D	335	0.629	36.940	-39.095	1.00	45.87	7	D	N
ATOM	11719	CA	VAL	D	335	1.101	35.843	-39.964	1.00	48.79	6	D	C
ATOM	11720	C	VAL	D	335	2.378	35.330	-39.297	1.00	48.37	6	D	C
ATOM	11721	O	VAL	D	335	3.313	36.124	-39.178	1.00	47.76	8	D	O
ATOM	11722	CB	VAL	D	335	1.249	36.229	-41.433	1.00	49.22	6	D	C
ATOM	11723	CG1	VAL	D	335	1.525	34.985	-42.290	1.00	49.47	6	D	C
ATOM	11724	CG2	VAL	D	335	0.009	36.941	-41.988	1.00	49.96	6	D	C
ATOM	11725	N	GLU	D	336	2.329	34.159	-38.658	1.00	48.35	7	D	N
ATOM	11726	CA	GLU	D	336	3.556	33.617	-38.062	1.00	48.87	6	D	C
ATOM	11727	C	GLU	D	336	4.091	32.577	-39.058	1.00	50.03	6	D	C
ATOM	11728	O	GLU	D	336	3.325	32.165	-39.935	1.00	49.23	8	D	O
ATOM	11729	CB	GLU	D	336	3.342	33.020	-36.685	1.00	48.34	6	D	C
ATOM	11730	CG	GLU	D	336	2.804	33.974	-35.638	1.00	46.81	6	D	C
ATOM	11731	CD	GLU	D	336	3.733	35.133	-35.310	1.00	46.96	6	D	C
ATOM	11732	OE1	GLU	D	336	4.942	34.894	-35.118	1.00	46.25	8	D	O
ATOM	11733	OE2	GLU	D	336	3.254	36.293	-35.222	1.00	45.58	8	D	O
ATOM	11734	N	ARG	D	337	5.374	32.237	-39.010	1.00	49.53	7	D	N
ATOM	11735	CA	ARG	D	337	5.910	31.245	-39.951	1.00	50.16	6	D	C
ATOM	11736	C	ARG	D	337	5.142	29.928	-39.864	1.00	49.15	6	D	C
ATOM	11737	O	ARG	D	337	4.798	29.591	-38.728	1.00	48.36	8	D	O
ATOM	11738	CB	ARG	D	337	7.403	31.111	-39.627	1.00	50.00	6	D	C
ATOM	11739	CG	ARG	D	337	8.150	30.192	-40.575	1.00	50.44	6	D	C
ATOM	11740	CD	ARG	D	337	9.643	30.155	-40.307	1.00	50.30	6	D	C
ATOM	11741	NE	ARG	D	337	9.998	29.891	-38.923	1.00	49.74	7	D	N
ATOM	11742	CZ	ARG	D	337	11.113	30.221	-38.280	1.00	50.05	6	D	C
ATOM	11743	NH1	ARG	D	337	12.075	30.886	-38.913	1.00	49.81	7	D	N
ATOM	11744	NH2	ARG	D	337	11.298	29.937	-36.986	1.00	47.45	7	D	N
ATOM	11745	N	SER	D	338	4.857	29.213	-40.926	1.00	47.62	7	D	N
ATOM	11746	CA	SER	D	338	4.064	27.979	-41.030	1.00	47.62	6	D	C
ATOM	11747	C	SER	D	338	4.139	27.327	-42.409	1.00	46.88	6	D	C
ATOM	11748	O	SER	D	338	4.810	27.936	-43.267	1.00	47.61	8	D	O
ATOM	11749	CB	SER	D	338	2.580	28.304	-40.772	1.00	47.29	6	D	C
ATOM	11750	OG	SER	D	338	2.365	28.734	-39.430	1.00	46.45	8	D	O
ATOM	11751	N	ASP	D	339	3.406	26.299	-42.797	1.00	45.42	7	D	N
ATOM	11752	CA	ASP	D	339	3.429	25.620	-44.104	1.00	41.65	6	D	C
ATOM	11753	C	ASP	D	339	2.069	25.372	-44.727	1.00	39.42	6	D	C
ATOM	11754	O	ASP	D	339	1.088	25.539	-43.991	1.00	40.92	8	D	O
ATOM	11755	CB	ASP	D	339	4.004	24.240	-43.670	1.00	39.92	6	D	C
ATOM	11756	CG	ASP	D	339	5.402	24.323	-43.106	1.00	38.08	6	D	C
ATOM	11757	OD1	ASP	D	339	6.141	25.179	-43.641	1.00	37.89	8	D	O
ATOM	11758	OD2	ASP	D	339	5.811	23.561	-42.198	1.00	36.54	8	D	O
ATOM	11759	N	PRO	D	340	1.879	24.962	-45.964	1.00	38.04	7	D	N
ATOM	11760	CA	PRO	D	340	0.593	24.596	-46.489	1.00	35.55	6	D	C
ATOM	11761	C	PRO	D	340	0.035	23.372	-45.749	1.00	31.84	6	D	C
ATOM	11762	O	PRO	D	340	-1.171	23.230	-45.762	1.00	27.00	8	D	O
ATOM	11763	CB	PRO	D	340	0.843	24.219	-47.942	1.00	37.28	6	D	C
ATOM	11764	CG	PRO	D	340	2.264	23.733	-47.906	1.00	37.39	6	D	C

150/188

ATOM	11765	CD	PRO	D	340	2.954	24.677	-46.952	1.00	38.00	6	D	C
ATOM	11766	N	THR	D	341	0.841	22.465	-45.202	1.00	28.16	7	D	N
ATOM	11767	CA	THR	D	341	0.260	21.273	-44.553	1.00	26.20	6	D	C
ATOM	11768	C	THR	D	341	1.336	20.552	-43.732	1.00	24.56	6	D	C
ATOM	11769	O	THR	D	341	2.515	20.643	-44.066	1.00	24.93	8	D	O
ATOM	11770	CB	THR	D	341	-0.338	20.276	-45.531	1.00	27.40	6	D	C
ATOM	11771	OG1	THR	D	341	-0.892	19.125	-44.859	1.00	27.27	8	D	O
ATOM	11772	CG2	THR	D	341	0.680	19.733	-46.538	1.00	28.75	6	D	C
ATOM	11773	N	ALA	D	342	0.966	19.795	-42.708	1.00	22.87	7	D	N
ATOM	11774	CA	ALA	D	342	1.955	19.044	-41.920	1.00	22.64	6	D	C
ATOM	11775	C	ALA	D	342	1.382	17.645	-41.634	1.00	23.26	6	D	C
ATOM	11776	O	ALA	D	342	1.593	17.048	-40.581	1.00	22.94	8	D	O
ATOM	11777	CB	ALA	D	342	2.285	19.753	-40.625	1.00	20.69	6	D	C
ATOM	11778	N	LEU	D	343	0.573	17.146	-42.563	1.00	23.04	7	D	N
ATOM	11779	CA	LEU	D	343	-0.144	15.895	-42.333	1.00	22.57	6	D	C
ATOM	11780	C	LEU	D	343	0.722	14.682	-42.132	1.00	21.19	6	D	C
ATOM	11781	O	LEU	D	343	0.528	13.946	-41.160	1.00	20.48	8	D	O
ATOM	11782	CB	LEU	D	343	-1.204	15.678	-43.429	1.00	21.19	6	D	C
ATOM	11783	CG	LEU	D	343	-2.144	14.530	-43.137	1.00	19.11	6	D	C
ATOM	11784	CD1	LEU	D	343	-3.031	14.800	-41.912	1.00	17.07	6	D	C
ATOM	11785	CD2	LEU	D	343	-3.001	14.267	-44.393	1.00	20.87	6	D	C
ATOM	11786	N	PRO	D	344	1.655	14.374	-43.019	1.00	20.97	7	D	N
ATOM	11787	CA	PRO	D	344	2.544	13.233	-42.810	1.00	19.17	6	D	C
ATOM	11788	C	PRO	D	344	3.232	13.381	-41.437	1.00	18.71	6	D	C
ATOM	11789	O	PRO	D	344	3.414	12.392	-40.731	1.00	16.77	8	D	O
ATOM	11790	CB	PRO	D	344	3.550	13.377	-43.955	1.00	21.17	6	D	C
ATOM	11791	CG	PRO	D	344	2.735	14.061	-45.033	1.00	19.67	6	D	C
ATOM	11792	CD	PRO	D	344	1.949	15.124	-44.258	1.00	21.46	6	D	C
ATOM	11793	N	ALA	D	345	3.742	14.560	-41.057	1.00	17.00	7	D	N
ATOM	11794	CA	ALA	D	345	4.388	14.734	-39.775	1.00	19.10	6	D	C
ATOM	11795	C	ALA	D	345	3.375	14.408	-38.654	1.00	18.30	6	D	C
ATOM	11796	O	ALA	D	345	3.666	13.728	-37.698	1.00	19.48	8	D	O
ATOM	11797	CB	ALA	D	345	4.900	16.153	-39.493	1.00	16.91	6	D	C
ATOM	11798	N	ALA	D	346	2.133	14.836	-38.860	1.00	18.11	7	D	N
ATOM	11799	CA	ALA	D	346	1.110	14.553	-37.842	1.00	16.76	6	D	C
ATOM	11800	C	ALA	D	346	0.884	13.053	-37.672	1.00	20.55	6	D	C
ATOM	11801	O	ALA	D	346	0.632	12.591	-36.532	1.00	18.34	8	D	O
ATOM	11802	CB	ALA	D	346	-0.152	15.272	-38.252	1.00	16.12	6	D	C
ATOM	11803	N	GLY	D	347	0.935	12.282	-38.774	1.00	17.18	7	D	N
ATOM	11804	CA	GLY	D	347	0.802	10.855	-38.689	1.00	17.92	6	D	C
ATOM	11805	C	GLY	D	347	1.955	10.240	-37.881	1.00	19.02	6	D	C
ATOM	11806	O	GLY	D	347	1.699	9.203	-37.239	1.00	16.46	8	D	O
ATOM	11807	N	MET	D	348	3.178	10.766	-38.002	1.00	18.86	7	D	N
ATOM	11808	CA	MET	D	348	4.242	10.268	-37.108	1.00	21.62	6	D	C
ATOM	11809	C	MET	D	348	3.915	10.584	-35.635	1.00	20.79	6	D	C
ATOM	11810	O	MET	D	348	4.228	9.841	-34.698	1.00	19.35	8	D	O
ATOM	11811	CB	MET	D	348	5.599	10.907	-37.460	1.00	22.07	6	D	C
ATOM	11812	CG	MET	D	348	6.743	10.687	-36.500	1.00	22.02	6	D	C
ATOM	11813	SE	MET	D	348	7.307	8.721	-36.815	1.00	48.59	34	D	SE
ATOM	11814	CE2	MET	D	348	6.680	8.047	-34.881	1.00	20.64	6	D	C
ATOM	11815	N	VAL	D	349	3.502	11.817	-35.338	1.00	18.51	7	D	N
ATOM	11816	CA	VAL	D	349	3.113	12.110	-33.941	1.00	17.72	6	D	C
ATOM	11817	C	VAL	D	349	2.016	11.117	-33.530	1.00	16.92	6	D	C
ATOM	11818	O	VAL	D	349	1.969	10.616	-32.418	1.00	16.26	8	D	O
ATOM	11819	CB	VAL	D	349	2.601	13.558	-33.816	1.00	16.79	6	D	C
ATOM	11820	CG1	VAL	D	349	2.056	13.894	-32.439	1.00	13.75	6	D	C
ATOM	11821	CG2	VAL	D	349	3.719	14.521	-34.221	1.00	13.43	6	D	C
ATOM	11822	N	MET	D	350	1.010	10.854	-34.369	1.00	17.01	7	D	N
ATOM	11823	CA	MET	D	350	-0.017	9.897	-34.050	1.00	17.67	6	D	C
ATOM	11824	C	MET	D	350	0.533	8.509	-33.732	1.00	17.88	6	D	C
ATOM	11825	O	MET	D	350	0.108	7.841	-32.783	1.00	18.70	8	D	O
ATOM	11826	CB	MET	D	350	-1.118	9.779	-35.139	1.00	20.49	6	D	C
ATOM	11827	CG	MET	D	350	-2.309	9.035	-34.484	1.00	17.99	6	D	C
ATOM	11828	SE	MET	D	350	-3.587	8.658	-36.094	1.00	36.42	34	D	SE
ATOM	11829	CE2	MET	D	350	-5.033	7.850	-35.046	1.00	14.71	6	D	C
ATOM	11830	N	GLU	D	351	1.491	8.019	-34.495	1.00	16.35	7	D	N
ATOM	11831	CA	GLU	D	351	2.101	6.711	-34.279	1.00	17.57	6	D	C
ATOM	11832	C	GLU	D	351	2.740	6.702	-32.871	1.00	16.73	6	D	C
ATOM	11833	O	GLU	D	351	2.609	5.732	-32.129	1.00	16.67	8	D	O
ATOM	11834	CB	GLU	D	351	3.193	6.539	-35.366	1.00	16.09	6	D	C
ATOM	11835	CG	GLU	D	351	4.130	5.354	-35.008	1.00	18.24	6	D	C
ATOM	11836	CD	GLU	D	351	4.979	4.921	-36.217	1.00	21.10	6	D	C
ATOM	11837	OE1	GLU	D	351	6.075	4.357	-36.015	1.00	20.77	8	D	O
ATOM	11838	OE2	GLU	D	351	4.571	5.129	-37.378	1.00	21.37	8	D	O
ATOM	11839	N	ALA	D	352	3.466	7.743	-32.543	1.00	16.46	7	D	N
ATOM	11840	CA	ALA	D	352	4.158	7.853	-31.255	1.00	17.87	6	D	C
ATOM	11841	C	ALA	D	352	3.203	7.890	-30.078	1.00	18.15	6	D	C
ATOM	11842	O	ALA	D	352	3.357	7.221	-29.049	1.00	17.95	8	D	O
ATOM	11843	CB	ALA	D	352	5.016	9.143	-31.322	1.00	15.90	6	D	C

151/188

ATOM	11844	N	VAL	D	353	2.123	8.673	-30.190	1.00	18.34	7	D	N
ATOM	11845	CA	VAL	D	353	1.133	8.766	-29.129	1.00	17.34	6	D	C
ATOM	11846	C	VAL	D	353	0.428	7.427	-28.962	1.00	18.12	6	D	C
ATOM	11847	O	VAL	D	353	0.248	6.942	-27.827	1.00	17.00	8	D	O
ATOM	11848	CB	VAL	D	353	0.220	9.940	-29.466	1.00	20.51	6	D	C
ATOM	11849	CG1	VAL	D	353	-1.003	9.983	-28.627	1.00	21.87	6	D	C
ATOM	11850	CG2	VAL	D	353	0.981	11.286	-29.403	1.00	19.51	6	D	C
ATOM	11851	N	VAL	D	354	0.091	6.718	-30.028	1.00	17.50	7	D	N
ATOM	11852	CA	VAL	D	354	-0.588	5.418	-29.893	1.00	17.63	6	D	C
ATOM	11853	C	VAL	D	354	0.353	4.452	-29.208	1.00	16.42	6	D	C
ATOM	11854	O	VAL	D	354	-0.077	3.725	-28.295	1.00	16.88	8	D	O
ATOM	11855	CB	VAL	D	354	-1.054	4.931	-31.298	1.00	17.50	6	D	C
ATOM	11856	CG1	VAL	D	354	-1.524	3.501	-31.227	1.00	18.76	6	D	C
ATOM	11857	CG2	VAL	D	354	-2.199	5.857	-31.774	1.00	17.95	6	D	C
ATOM	11858	N	ALA	D	355	1.599	4.364	-29.702	1.00	16.77	7	D	N
ATOM	11859	CA	ALA	D	355	2.576	3.468	-29.091	1.00	17.48	6	D	C
ATOM	11860	C	ALA	D	355	2.710	3.735	-27.592	1.00	17.40	6	D	C
ATOM	11861	O	ALA	D	355	2.881	2.833	-26.781	1.00	18.33	8	D	O
ATOM	11862	CB	ALA	D	355	3.988	3.718	-29.648	1.00	19.47	6	D	C
ATOM	11863	N	THR	D	356	2.687	5.022	-27.221	1.00	15.43	7	D	N
ATOM	11864	CA	THR	D	356	2.886	5.444	-25.857	1.00	16.36	6	D	C
ATOM	11865	C	THR	D	356	1.714	4.917	-24.996	1.00	16.74	6	D	C
ATOM	11866	O	THR	D	356	1.998	4.353	-23.926	1.00	17.48	8	D	O
ATOM	11867	CB	THR	D	356	2.949	6.982	-25.686	1.00	15.38	6	D	C
ATOM	11868	OG1	THR	D	356	4.072	7.449	-26.441	1.00	15.97	8	D	O
ATOM	11869	CG2	THR	D	356	3.142	7.455	-24.257	1.00	13.71	6	D	C
ATOM	11870	N	VAL	D	357	0.489	5.182	-25.385	1.00	16.06	7	D	N
ATOM	11871	CA	VAL	D	357	-0.653	4.673	-24.600	1.00	16.06	6	D	C
ATOM	11872	C	VAL	D	357	-0.627	3.164	-24.476	1.00	15.53	6	D	C
ATOM	11873	O	VAL	D	357	-0.951	2.510	-23.481	1.00	14.40	8	D	O
ATOM	11874	CB	VAL	D	357	-1.956	5.142	-25.301	1.00	16.40	6	D	C
ATOM	11875	CG1	VAL	D	357	-3.210	4.452	-24.829	1.00	15.78	6	D	C
ATOM	11876	CG2	VAL	D	357	-2.130	6.659	-25.031	1.00	16.28	6	D	C
ATOM	11877	N	LEU	D	358	-0.229	2.499	-25.573	1.00	17.45	7	D	N
ATOM	11878	CA	LEU	D	358	-0.155	1.050	-25.612	1.00	19.49	6	D	C
ATOM	11879	C	LEU	D	358	0.875	0.528	-24.603	1.00	17.94	6	D	C
ATOM	11880	O	LEU	D	358	0.665	-0.507	-23.942	1.00	16.49	8	D	O
ATOM	11881	CB	LEU	D	358	0.186	0.532	-27.004	1.00	22.35	6	D	C
ATOM	11882	CG	LEU	D	358	-0.920	-0.263	-27.665	1.00	28.99	6	D	C
ATOM	11883	CD1	LEU	D	358	-1.270	-1.522	-26.860	1.00	28.95	6	D	C
ATOM	11884	CD2	LEU	D	358	-2.187	0.595	-27.812	1.00	26.85	6	D	C
ATOM	11885	N	ALA	D	359	2.074	1.085	-24.684	1.00	15.08	7	D	N
ATOM	11886	CA	ALA	D	359	3.139	0.762	-23.746	1.00	16.51	6	D	C
ATOM	11887	C	ALA	D	359	2.616	1.061	-22.330	1.00	16.72	6	D	C
ATOM	11888	O	ALA	D	359	2.787	0.192	-21.490	1.00	19.59	8	D	O
ATOM	11889	CB	ALA	D	359	4.362	1.655	-23.935	1.00	16.12	6	D	C
ATOM	11890	N	GLN	D	360	1.913	2.179	-22.113	1.00	17.62	7	D	N
ATOM	11891	CA	GLN	D	360	1.397	2.387	-20.747	1.00	17.37	6	D	C
ATOM	11892	C	GLN	D	360	0.498	1.262	-20.285	1.00	17.53	6	D	C
ATOM	11893	O	GLN	D	360	0.643	0.820	-19.137	1.00	14.52	8	D	O
ATOM	11894	CB	GLN	D	360	0.732	3.748	-20.550	1.00	19.32	6	D	C
ATOM	11895	CG	GLN	D	360	1.794	4.895	-20.654	1.00	19.94	6	D	C
ATOM	11896	CD	GLN	D	360	0.988	6.202	-20.676	1.00	20.57	6	D	C
ATOM	11897	OE1	GLN	D	360	0.236	6.497	-21.628	1.00	19.01	8	D	O
ATOM	11898	NE2	GLN	D	360	1.110	6.970	-19.610	1.00	17.85	7	D	N
ATOM	11899	N	GLU	D	361	-0.377	0.795	-21.179	1.00	16.77	7	D	N
ATOM	11900	CA	GLU	D	361	-1.355	-0.234	-20.857	1.00	19.63	6	D	C
ATOM	11901	C	GLU	D	361	-0.639	-1.559	-20.551	1.00	18.13	6	D	C
ATOM	11902	O	GLU	D	361	-1.023	-2.255	-19.629	1.00	15.58	8	D	O
ATOM	11903	CB	GLU	D	361	-2.370	-0.490	-22.003	1.00	18.23	6	D	C
ATOM	11904	CG	GLU	D	361	-3.614	-1.225	-21.545	1.00	19.92	6	D	C
ATOM	11905	CD	GLU	D	361	-4.495	-0.468	-20.570	1.00	18.77	6	D	C
ATOM	11906	OE1	GLU	D	361	-4.543	0.774	-20.588	1.00	19.99	8	D	O
ATOM	11907	OE2	GLU	D	361	-5.150	-1.064	-19.676	1.00	18.93	8	D	O
ATOM	11908	N	ILE	D	362	0.361	-1.899	-21.356	1.00	20.93	7	D	N
ATOM	11909	CA	ILE	D	362	1.164	-3.103	-21.154	1.00	18.96	6	D	C
ATOM	11910	C	ILE	D	362	1.870	-3.101	-19.810	1.00	18.60	6	D	C
ATOM	11911	O	ILE	D	362	1.895	-4.136	-19.128	1.00	17.88	8	D	O
ATOM	11912	CB	ILE	D	362	2.177	-3.287	-22.320	1.00	19.07	6	D	C
ATOM	11913	CG1	ILE	D	362	1.368	-3.713	-23.545	1.00	18.19	6	D	C
ATOM	11914	CG2	ILE	D	362	3.247	-4.356	-22.057	1.00	19.27	6	D	C
ATOM	11915	CD1	ILE	D	362	2.086	-3.411	-24.856	1.00	18.20	6	D	C
ATOM	11916	N	LEU	D	363	2.427	-1.950	-19.415	1.00	18.08	7	D	N
ATOM	11917	CA	LEU	D	363	3.151	-1.835	-18.163	1.00	19.78	6	D	C
ATOM	11918	C	LEU	D	363	2.205	-1.925	-16.979	1.00	20.74	6	D	C
ATOM	11919	O	LEU	D	363	2.540	-2.508	-15.960	1.00	19.82	8	D	O
ATOM	11920	CB	LEU	D	363	3.973	-0.544	-18.087	1.00	18.95	6	D	C
ATOM	11921	CG	LEU	D	363	5.075	-0.564	-19.159	1.00	19.32	6	D	C
ATOM	11922	CD1	LEU	D	363	5.710	0.800	-19.273	1.00	19.59	6	D	C

152/188

ATOM	11923	CD2	LEU	D	363	6.113	-1.667	-18.975	1.00	15.24	6	D	C
ATOM	11924	N	GLU	D	364	0.952	-1.502	-17.213	1.00	20.82	7	D	N
ATOM	11925	CA	GLU	D	364	-0.013	-1.635	-16.133	1.00	19.56	6	D	C
ATOM	11926	C	GLU	D	364	-0.539	-3.064	-16.067	1.00	17.92	6	D	C
ATOM	11927	O	GLU	D	364	-0.640	-3.638	-14.978	1.00	16.35	8	D	O
ATOM	11928	CB	GLU	D	364	-1.129	-0.620	-16.386	1.00	21.12	6	D	C
ATOM	11929	CG	AGLU	D	364	-0.802	0.805	-15.948	0.50	22.05	6	D	C
ATOM	11930	CG	BGLU	D	364	-2.406	-0.789	-15.639	0.50	21.93	6	D	C
ATOM	11931	CD	AGLU	D	364	-1.818	1.813	-16.460	0.50	23.60	6	D	C
ATOM	11932	CD	BGLU	D	364	-3.507	0.174	-16.057	0.50	22.55	6	D	C
ATOM	11933	OE1	AGLU	D	364	-2.908	1.416	-16.944	0.50	23.47	8	D	O
ATOM	11934	OE1	BGLU	D	364	-3.302	1.235	-16.650	0.50	22.19	8	D	O
ATOM	11935	OE2	AGLU	D	364	-1.523	3.021	-16.409	0.50	24.05	8	D	O
ATOM	11936	OE2	BGLU	D	364	-4.644	-0.199	-15.743	0.50	24.41	8	D	O
ATOM	11937	N	LYS	D	365	-0.760	-3.708	-17.199	1.00	16.73	7	D	N
ATOM	11938	CA	LYS	D	365	-1.325	-5.056	-17.115	1.00	17.93	6	D	C
ATOM	11939	C	LYS	D	365	-0.314	-6.075	-16.589	1.00	18.46	6	D	C
ATOM	11940	O	LYS	D	365	-0.736	-6.997	-15.895	1.00	19.62	8	D	O
ATOM	11941	CB	LYS	D	365	-1.888	-5.526	-18.464	1.00	16.31	6	D	C
ATOM	11942	CG	LYS	D	365	-2.409	-6.948	-18.497	1.00	17.43	6	D	C
ATOM	11943	CD	LYS	D	365	-3.299	-7.189	-19.718	1.00	19.01	6	D	C
ATOM	11944	CE	LYS	D	365	-3.615	-8.677	-19.888	1.00	19.53	6	D	C
ATOM	11945	NZ	LYS	D	365	-4.082	-9.280	-18.592	1.00	20.26	7	D	N
ATOM	11946	N	PHE	D	366	0.949	-5.981	-16.990	1.00	19.05	7	D	N
ATOM	11947	CA	PHE	D	366	1.927	-7.008	-16.643	1.00	18.37	6	D	C
ATOM	11948	C	PHE	D	366	3.023	-6.619	-15.671	1.00	19.60	6	D	C
ATOM	11949	O	PHE	D	366	3.445	-5.486	-15.652	1.00	18.87	8	D	O
ATOM	11950	CB	PHE	D	366	2.620	-7.496	-17.951	1.00	16.72	6	D	C
ATOM	11951	CG	PHE	D	366	1.704	-8.017	-19.030	1.00	16.37	6	D	C
ATOM	11952	CD1	PHE	D	366	1.380	-7.220	-20.121	1.00	14.32	6	D	C
ATOM	11953	CD2	PHE	D	366	1.147	-9.302	-18.917	1.00	16.99	6	D	C
ATOM	11954	CE1	PHE	D	366	0.527	-7.659	-21.123	1.00	14.05	6	D	C
ATOM	11955	CE2	PHE	D	366	0.272	-9.735	-19.940	1.00	16.84	6	D	C
ATOM	11956	CZ	PHE	D	366	0.005	-8.951	-21.023	1.00	14.03	6	D	C
ATOM	11957	N	SER	D	367	3.543	-7.591	-14.903	1.00	18.80	7	D	N
ATOM	11958	CA	SER	D	367	4.690	-7.329	-14.022	1.00	19.77	6	D	C
ATOM	11959	C	SER	D	367	5.752	-6.674	-14.916	1.00	18.59	6	D	C
ATOM	11960	O	SER	D	367	6.065	-7.254	-15.946	1.00	16.12	8	D	O
ATOM	11961	CB	SER	D	367	5.262	-8.630	-13.434	1.00	18.46	6	D	C
ATOM	11962	OG	SER	D	367	4.228	-9.395	-12.825	1.00	18.08	8	D	O
ATOM	11963	N	SER	D	368	6.234	-5.511	-14.519	1.00	18.68	7	D	N
ATOM	11964	CA	SER	D	368	7.138	-4.809	-15.403	1.00	19.40	6	D	C
ATOM	11965	C	SER	D	368	8.103	-3.867	-14.717	1.00	19.32	6	D	C
ATOM	11966	O	SER	D	368	8.394	-2.801	-15.295	1.00	20.43	8	D	O
ATOM	11967	CB	SER	D	368	6.225	-4.088	-16.427	1.00	17.52	6	D	C
ATOM	11968	OG	SER	D	368	5.373	-3.168	-15.713	1.00	19.87	8	D	O
ATOM	11969	N	ASP	D	369	8.637	-4.227	-13.558	1.00	18.36	7	D	N
ATOM	11970	CA	ASP	D	369	9.708	-3.418	-12.948	1.00	17.88	6	D	C
ATOM	11971	C	ASP	D	369	10.948	-3.518	-13.822	1.00	16.71	6	D	C
ATOM	11972	O	ASP	D	369	11.832	-2.640	-13.845	1.00	15.38	8	D	O
ATOM	11973	CB	ASP	D	369	10.087	-3.899	-11.514	1.00	19.79	6	D	C
ATOM	11974	CG	ASP	D	369	9.076	-3.439	-10.468	1.00	21.79	6	D	C
ATOM	11975	OD1	ASP	D	369	8.980	-3.947	-9.333	1.00	21.63	8	D	O
ATOM	11976	OD2	ASP	D	369	8.370	-2.452	-10.794	1.00	23.09	8	D	O
ATOM	11977	N	ASN	D	370	11.080	-4.648	-14.516	1.00	17.30	7	D	N
ATOM	11978	CA	ASN	D	370	12.228	-4.897	-15.385	1.00	16.45	6	D	C
ATOM	11979	C	ASN	D	370	11.826	-5.648	-16.648	1.00	17.83	6	D	C
ATOM	11980	O	ASN	D	370	10.814	-6.347	-16.714	1.00	17.02	8	D	O
ATOM	11981	CB	ASN	D	370	13.374	-5.585	-14.651	1.00	17.04	6	D	C
ATOM	11982	CG	ASN	D	370	12.970	-6.936	-14.104	1.00	17.48	6	D	C
ATOM	11983	OD1	ASN	D	370	12.772	-7.837	-14.887	1.00	17.69	8	D	O
ATOM	11984	ND2	ASN	D	370	12.764	-7.107	-12.808	1.00	16.94	7	D	N
ATOM	11985	N	LEU	D	371	12.702	-5.622	-17.667	1.00	17.65	7	D	N
ATOM	11986	CA	LEU	D	371	12.354	-6.165	-18.982	1.00	18.22	6	D	C
ATOM	11987	C	LEU	D	371	12.185	-7.665	-18.964	1.00	18.50	6	D	C
ATOM	11988	O	LEU	D	371	11.255	-8.228	-19.522	1.00	19.61	8	D	O
ATOM	11989	CB	LEU	D	371	13.363	-5.701	-20.043	1.00	19.74	6	D	C
ATOM	11990	CG	LEU	D	371	12.969	-6.049	-21.494	1.00	21.22	6	D	C
ATOM	11991	CD1	LEU	D	371	11.666	-5.354	-21.914	1.00	19.84	6	D	C
ATOM	11992	CD2	LEU	D	371	14.032	-5.643	-22.509	1.00	19.70	6	D	C
ATOM	11993	N	GLU	D	372	13.116	-8.339	-18.303	1.00	19.36	7	D	N
ATOM	11994	CA	GLU	D	372	13.083	-9.780	-18.166	1.00	21.75	6	D	C
ATOM	11995	C	GLU	D	372	11.735	-10.219	-17.623	1.00	20.78	6	D	C
ATOM	11996	O	GLU	D	372	11.106	-11.056	-18.286	1.00	19.91	8	D	O
ATOM	11997	CB	GLU	D	372	14.238	-10.248	-17.269	1.00	24.51	6	D	C
ATOM	11998	CG	GLU	D	372	14.477	-11.755	-17.239	1.00	30.41	6	D	C
ATOM	11999	CD	GLU	D	372	15.776	-11.974	-16.464	1.00	32.07	6	D	C
ATOM	12000	OE1	GLU	D	372	15.647	-12.042	-15.238	1.00	33.89	8	D	O
ATOM	12001	OE2	GLU	D	372	16.898	-11.994	-17.007	1.00	34.96	8	D	O

153/188

ATOM	12002	N	GLU	D	373	11.300	-9.718	-16.469	1.00	18.61	7	D	N
ATOM	12003	CA	GLU	D	373	10.004	-10.248	-15.986	1.00	20.18	6	D	C
ATOM	12004	C	GLU	D	373	8.867	-9.863	-16.927	1.00	17.35	6	D	C
ATOM	12005	O	GLU	D	373	7.859	-10.572	-16.993	1.00	17.09	8	D	O
ATOM	12006	CB	GLU	D	373	9.679	-9.829	-14.533	1.00	20.01	6	D	C
ATOM	12007	CG	GLU	D	373	9.607	-8.319	-14.297	1.00	20.70	6	D	C
ATOM	12008	CD	GLU	D	373	9.383	-7.910	-12.850	1.00	22.79	6	D	C
ATOM	12009	OE1	GLU	D	373	8.719	-6.865	-12.574	1.00	22.63	8	D	O
ATOM	12010	OE2	GLU	D	373	9.913	-8.548	-11.903	1.00	20.68	8	D	O
ATOM	12011	N	LEU	D	374	8.918	-8.676	-17.520	1.00	16.70	7	D	N
ATOM	12012	CA	LEU	D	374	7.861	-8.284	-18.446	1.00	16.92	6	D	C
ATOM	12013	C	LEU	D	374	7.740	-9.192	-19.658	1.00	16.42	6	D	C
ATOM	12014	O	LEU	D	374	6.667	-9.624	-20.062	1.00	15.47	8	D	O
ATOM	12015	CB	LEU	D	374	8.174	-6.851	-18.944	1.00	17.19	6	D	C
ATOM	12016	CG	LEU	D	374	7.185	-6.340	-20.004	1.00	18.76	6	D	C
ATOM	12017	CD1	LEU	D	374	5.742	-6.461	-19.543	1.00	14.72	6	D	C
ATOM	12018	CD2	LEU	D	374	7.576	-4.899	-20.340	1.00	18.82	6	D	C
ATOM	12019	N	LYS	D	375	8.919	-9.454	-20.274	1.00	17.20	7	D	N
ATOM	12020	CA	LYS	D	375	8.989	-10.364	-21.400	1.00	18.85	6	D	C
ATOM	12021	C	LYS	D	375	8.494	-11.733	-20.944	1.00	19.42	6	D	C
ATOM	12022	O	LYS	D	375	7.680	-12.312	-21.670	1.00	19.79	8	D	O
ATOM	12023	CB	LYS	D	375	10.405	-10.513	-22.012	1.00	20.12	6	D	C
ATOM	12024	CG	LYS	D	375	10.732	-9.320	-22.858	1.00	23.88	6	D	C
ATOM	12025	CD	LYS	D	375	12.175	-9.099	-23.260	1.00	27.15	6	D	C
ATOM	12026	CE	LYS	D	375	12.739	-10.247	-24.073	1.00	32.41	6	D	C
ATOM	12027	NZ	LYS	D	375	13.920	-9.683	-24.867	1.00	37.21	7	D	N
ATOM	12028	N	GLN	D	376	8.878	-12.174	-19.773	1.00	20.56	7	D	N
ATOM	12029	CA	GLN	D	376	8.354	-13.433	-19.244	1.00	21.92	6	D	C
ATOM	12030	C	GLN	D	376	6.842	-13.370	-19.075	1.00	20.39	6	D	C
ATOM	12031	O	GLN	D	376	6.134	-14.287	-19.498	1.00	19.29	8	D	O
ATOM	12032	CB	GLN	D	376	9.072	-13.769	-17.918	1.00	23.39	6	D	C
ATOM	12033	CG	GLN	D	376	10.411	-14.437	-18.123	1.00	28.73	6	D	C
ATOM	12034	CD	GLN	D	376	11.396	-14.370	-16.977	1.00	32.21	6	D	C
ATOM	12035	OE1	GLN	D	376	11.256	-13.753	-15.909	1.00	34.09	8	D	O
ATOM	12036	NE2	GLN	D	376	12.579	-14.967	-17.210	1.00	33.55	7	D	N
ATOM	12037	N	ALA	D	377	6.316	-12.321	-18.425	1.00	18.29	7	D	N
ATOM	12038	CA	ALA	D	377	4.882	-12.165	-18.228	1.00	18.70	6	D	C
ATOM	12039	C	ALA	D	377	4.066	-12.173	-19.519	1.00	19.01	6	D	C
ATOM	12040	O	ALA	D	377	3.060	-12.888	-19.663	1.00	17.21	8	D	O
ATOM	12041	CB	ALA	D	377	4.582	-10.909	-17.398	1.00	15.71	6	D	C
ATOM	12042	N	VAL	D	378	4.592	-11.511	-20.545	1.00	19.72	7	D	N
ATOM	12043	CA	VAL	D	378	3.928	-11.441	-21.839	1.00	18.52	6	D	C
ATOM	12044	C	VAL	D	378	3.938	-12.790	-22.557	1.00	20.28	6	D	C
ATOM	12045	O	VAL	D	378	2.890	-13.214	-23.057	1.00	18.55	8	D	O
ATOM	12046	CB	VAL	D	378	4.483	-10.302	-22.697	1.00	18.46	6	D	C
ATOM	12047	CG1	VAL	D	378	3.848	-10.303	-24.083	1.00	18.58	6	D	C
ATOM	12048	CG2	VAL	D	378	4.181	-8.947	-22.048	1.00	17.15	6	D	C
ATOM	12049	N	ALA	D	379	5.044	-13.505	-22.508	1.00	21.06	7	D	N
ATOM	12050	CA	ALA	D	379	5.091	-14.834	-23.162	1.00	20.88	6	D	C
ATOM	12051	C	ALA	D	379	4.083	-15.749	-22.518	1.00	20.99	6	D	C
ATOM	12052	O	ALA	D	379	3.421	-16.580	-23.171	1.00	21.19	8	D	O
ATOM	12053	CB	ALA	D	379	6.519	-15.428	-23.017	1.00	16.31	6	D	C
ATOM	12054	N	LYS	D	380	4.082	-15.759	-21.176	1.00	22.63	7	D	N
ATOM	12055	CA	LYS	D	380	3.167	-16.619	-20.421	1.00	23.55	6	D	C
ATOM	12056	C	LYS	D	380	1.717	-16.277	-20.761	1.00	22.49	6	D	C
ATOM	12057	O	LYS	D	380	0.899	-17.169	-20.946	1.00	20.85	8	D	O
ATOM	12058	CB	LYS	D	380	3.406	-16.519	-18.900	1.00	27.00	6	D	C
ATOM	12059	CG	LYS	D	380	2.521	-17.437	-18.058	1.00	29.45	6	D	C
ATOM	12060	CD	LYS	D	380	2.890	-17.447	-16.597	1.00	30.15	6	D	C
ATOM	12061	CE	LYS	D	380	2.053	-16.715	-15.590	1.00	33.49	6	D	C
ATOM	12062	NZ	LYS	D	380	0.658	-17.128	-15.313	1.00	30.56	7	D	N
ATOM	12063	N	HIS	D	381	1.370	-14.988	-20.783	1.00	19.46	7	D	N
ATOM	12064	CA	HIS	D	381	0.028	-14.565	-21.149	1.00	19.27	6	D	C
ATOM	12065	C	HIS	D	381	-0.285	-14.937	-22.585	1.00	19.75	6	D	C
ATOM	12066	O	HIS	D	381	-1.398	-15.388	-22.823	1.00	19.99	8	D	O
ATOM	12067	CB	HIS	D	381	-0.050	-13.026	-20.944	1.00	20.84	6	D	C
ATOM	12068	CG	HIS	D	381	-1.419	-12.578	-21.398	1.00	22.93	6	D	C
ATOM	12069	ND1	HIS	D	381	-2.511	-12.773	-20.588	1.00	22.39	7	D	N
ATOM	12070	CD2	HIS	D	381	-1.843	-11.975	-22.519	1.00	20.38	6	D	C
ATOM	12071	CE1	HIS	D	381	-3.582	-12.285	-21.210	1.00	23.78	6	D	C
ATOM	12072	NE2	HIS	D	381	-3.201	-11.819	-22.368	1.00	23.15	7	D	N
ATOM	12073	N	ARG	D	382	0.636	-14.843	-23.536	1.00	19.08	7	D	N
ATOM	12074	CA	ARG	D	382	0.329	-15.254	-24.904	1.00	21.03	6	D	C
ATOM	12075	C	ARG	D	382	0.152	-16.783	-25.016	1.00	21.69	6	D	C
ATOM	12076	O	ARG	D	382	-0.783	-17.179	-25.692	1.00	22.42	8	D	O
ATOM	12077	CB	ARG	D	382	1.401	-14.831	-25.898	1.00	21.85	6	D	C
ATOM	12078	CG	ARG	D	382	1.438	-13.359	-26.246	1.00	22.76	6	D	C
ATOM	12079	CD	ARG	D	382	2.739	-12.982	-26.940	1.00	22.59	6	D	C
ATOM	12080	NE	ARG	D	382	2.589	-11.650	-27.531	1.00	24.96	7	D	N

154/188

ATOM	12081	CZ	ARG	D	382	3.581	-10.824	-27.799	1.00	24.99	6	D	C
ATOM	12082	NH1	ARG	D	382	4.833	-11.216	-27.476	1.00	26.21	7	D	N
ATOM	12083	NH2	ARG	D	382	3.298	-9.673	-28.390	1.00	23.89	7	D	N
ATOM	12084	N	ASP	D	383	0.831	-17.553	-24.188	1.00	22.07	7	D	N
ATOM	12085	CA	ASP	D	383	0.614	-18.998	-24.169	1.00	23.91	6	D	C
ATOM	12086	C	ASP	D	383	-0.759	-19.329	-23.616	1.00	23.06	6	D	C
ATOM	12087	O	ASP	D	383	-1.494	-20.164	-24.146	1.00	22.23	8	D	O
ATOM	12088	CB	ASP	D	383	1.685	-19.688	-23.287	1.00	27.20	6	D	C
ATOM	12089	CG	ASP	D	383	1.498	-21.197	-23.393	1.00	31.99	6	D	C
ATOM	12090	OD1	ASP	D	383	1.078	-21.826	-22.404	1.00	35.64	8	D	O
ATOM	12091	OD2	ASP	D	383	1.665	-21.748	-24.505	1.00	33.58	8	D	O
ATOM	12092	N	TYR	D	384	-1.139	-18.657	-22.527	1.00	21.97	7	D	N
ATOM	12093	CA	TYR	D	384	-2.460	-18.848	-21.927	1.00	21.77	6	D	C
ATOM	12094	C	TYR	D	384	-3.541	-18.529	-22.957	1.00	21.66	6	D	C
ATOM	12095	O	TYR	D	384	-4.542	-19.242	-23.105	1.00	20.26	8	D	O
ATOM	12096	CB	TYR	D	384	-2.628	-17.999	-20.627	1.00	22.84	6	D	C
ATOM	12097	CG	TYR	D	384	-3.989	-18.300	-20.024	1.00	22.89	6	D	C
ATOM	12098	CD1	TYR	D	384	-4.183	-19.345	-19.134	1.00	24.49	6	D	C
ATOM	12099	CD2	TYR	D	384	-5.096	-17.562	-20.423	1.00	24.14	6	D	C
ATOM	12100	CE1	TYR	D	384	-5.437	-19.631	-18.611	1.00	23.70	6	D	C
ATOM	12101	CE2	TYR	D	384	-6.363	-17.833	-19.919	1.00	24.52	6	D	C
ATOM	12102	CZ	TYR	D	384	-6.507	-18.887	-19.034	1.00	24.35	6	D	C
ATOM	12103	OH	TYR	D	384	-7.773	-19.148	-18.580	1.00	23.96	8	D	O
ATOM	12104	N	THR	D	385	-3.420	-17.364	-23.622	1.00	18.85	7	D	N
ATOM	12105	CA	THR	D	385	-4.390	-16.935	-24.618	1.00	20.55	6	D	C
ATOM	12106	C	THR	D	385	-4.566	-17.934	-25.761	1.00	20.70	6	D	C
ATOM	12107	O	THR	D	385	-5.677	-18.236	-26.170	1.00	19.67	8	D	O
ATOM	12108	CB	THR	D	385	-3.760	-15.649	-25.225	1.00	19.85	6	D	C
ATOM	12109	OG1	THR	D	385	-3.806	-14.693	-24.191	1.00	20.02	8	D	O
ATOM	12110	CG2	THR	D	385	-4.557	-15.168	-26.431	1.00	21.82	6	D	C
ATOM	12111	N	LYS	D	386	-3.432	-18.370	-26.299	1.00	20.47	7	D	N
ATOM	12112	CA	LYS	D	386	-3.411	-19.341	-27.398	1.00	24.11	6	D	C
ATOM	12113	C	LYS	D	386	-4.109	-20.631	-27.028	1.00	23.97	6	D	C
ATOM	12114	O	LYS	D	386	-4.760	-21.245	-27.909	1.00	25.32	8	D	O
ATOM	12115	CB	LYS	D	386	-1.932	-19.537	-27.763	1.00	29.41	6	D	C
ATOM	12116	CG	LYS	D	386	-1.478	-20.797	-28.474	1.00	34.51	6	D	C
ATOM	12117	CD	LYS	D	386	-1.567	-20.749	-29.976	1.00	38.94	6	D	C
ATOM	12118	CE	LYS	D	386	-0.584	-21.663	-30.689	1.00	41.82	6	D	C
ATOM	12119	NZ	LYS	D	386	-0.715	-23.128	-30.431	1.00	42.06	7	D	N
ATOM	12120	N	ASN	D	387	-3.972	-21.106	-25.786	1.00	21.41	7	D	N
ATOM	12121	CA	ASN	D	387	-4.560	-22.378	-25.380	1.00	23.75	6	D	C
ATOM	12122	C	ASN	D	387	-5.905	-22.252	-24.671	1.00	22.61	6	D	C
ATOM	12123	O	ASN	D	387	-6.470	-23.230	-24.208	1.00	19.92	8	D	O
ATOM	12124	CB	ASN	D	387	-3.583	-23.132	-24.479	1.00	25.32	6	D	C
ATOM	12125	CG	ASN	D	387	-2.343	-23.552	-25.261	1.00	28.23	6	D	C
ATOM	12126	OD1	ASN	D	387	-2.466	-24.475	-26.071	1.00	26.79	8	D	O
ATOM	12127	ND2	ASN	D	387	-1.178	-22.947	-25.098	1.00	28.11	7	D	N
ATOM	12128	N	TYR	D	388	-6.475	-21.050	-24.598	1.00	21.64	7	D	N
ATOM	12129	CA	TYR	D	388	-7.773	-20.884	-23.916	1.00	22.27	6	D	C
ATOM	12130	C	TYR	D	388	-8.920	-21.638	-24.570	1.00	23.65	6	D	C
ATOM	12131	O	TYR	D	388	-9.829	-22.158	-23.870	1.00	22.15	8	D	O
ATOM	12132	CB	TYR	D	388	-8.085	-19.392	-23.892	1.00	21.59	6	D	C
ATOM	12133	CG	TYR	D	388	-9.378	-19.060	-23.157	1.00	21.82	6	D	C
ATOM	12134	CD1	TYR	D	388	-9.415	-18.897	-21.788	1.00	22.80	6	D	C
ATOM	12135	CD2	TYR	D	388	-10.555	-18.903	-23.872	1.00	23.24	6	D	C
ATOM	12136	CE1	TYR	D	388	-10.598	-18.570	-21.124	1.00	23.48	6	D	C
ATOM	12137	CE2	TYR	D	388	-11.742	-18.586	-23.220	1.00	22.76	6	D	C
ATOM	12138	CZ	TYR	D	388	-11.750	-18.419	-21.857	1.00	22.20	6	D	C
ATOM	12139	OH	TYR	D	388	-12.944	-18.112	-21.219	1.00	22.98	8	D	O
ATOM	12140	OT	TYR	D	388	-8.994	-21.814	-25.801	1.00	23.64	8	D	O
ATOM	12142	CO	NCO	S	1	-9.104	45.942	-20.422	1.00	34.24	27	S	CO
ATOM	12143	N1	NCO	S	1	-9.773	45.450	-22.205	1.00	35.37	7	S	N
ATOM	12144	N2	NCO	S	1	-7.846	47.125	-21.284	1.00	35.44	7	S	N
ATOM	12145	N3	NCO	S	1	-7.854	44.481	-20.408	1.00	34.97	7	S	N
ATOM	12146	N4	NCO	S	1	-10.431	44.716	-19.660	1.00	36.25	7	S	N
ATOM	12147	N5	NCO	S	1	-10.461	47.331	-20.266	1.00	34.42	7	S	N
ATOM	12148	N6	NCO	S	1	-8.467	46.490	-18.633	1.00	34.64	7	S	N
ATOM	12149	CO	NCO	S	2	11.101	-8.035	29.991	1.00	86.73	27	S	CO
ATOM	12150	N1	NCO	S	2	12.696	-7.259	29.163	1.00	86.35	7	S	N
ATOM	12151	N2	NCO	S	2	10.145	-7.713	28.327	1.00	86.35	7	S	N
ATOM	12152	N3	NCO	S	2	10.611	-6.265	30.636	1.00	86.47	7	S	N
ATOM	12153	N4	NCO	S	2	12.095	-8.351	31.633	1.00	86.86	7	S	N
ATOM	12154	N5	NCO	S	2	11.629	-9.798	29.371	1.00	86.17	7	S	N
ATOM	12155	N6	NCO	S	2	9.489	-8.781	30.796	1.00	86.41	7	S	N
ATOM	12156	CO	NCO	S	3	2.792	41.093	-0.822	1.00	41.07	27	S	CO
ATOM	12157	N1	NCO	S	3	4.642	41.397	-0.253	1.00	40.97	7	S	N
ATOM	12158	N2	NCO	S	3	2.611	43.041	-1.079	1.00	42.39	7	S	N
ATOM	12159	N3	NCO	S	3	2.139	41.329	0.988	1.00	41.12	7	S	N
ATOM	12160	N4	NCO	S	3	3.018	39.198	-0.535	1.00	41.62	7	S	N

155/188

ATOM	12161	N5	NCO	S	3	3.430	40.963	-2.655	1.00	41.19	7	S	N
ATOM	12162	N6	NCO	S	3	0.956	40.863	-1.412	1.00	41.44	7	S	N
ATOM	12163	CO	NCO	S	4	-25.533	29.155	2.578	1.00	39.72	27	S	CO
ATOM	12164	N1	NCO	S	4	-23.771	29.034	1.705	1.00	39.81	7	S	N
ATOM	12165	N2	NCO	S	4	-26.309	28.679	0.851	1.00	42.77	7	S	N
ATOM	12166	N3	NCO	S	4	-25.607	31.073	2.138	1.00	41.75	7	S	N
ATOM	12167	N4	NCO	S	4	-24.721	29.673	4.260	1.00	40.68	7	S	N
ATOM	12168	N5	NCO	S	4	-25.440	27.284	3.086	1.00	41.58	7	S	N
ATOM	12169	N6	NCO	S	4	-27.342	29.289	3.303	1.00	41.29	7	S	N
ATOM	12170	CO	NCO	S	5	-21.689	14.716	-44.134	1.00	52.82	27	S	CO
ATOM	12171	N1	NCO	S	5	-19.775	14.426	-44.502	1.00	52.30	7	S	N
ATOM	12172	N2	NCO	S	5	-22.120	13.667	-45.725	1.00	53.14	7	S	N
ATOM	12173	N3	NCO	S	5	-21.632	16.326	-45.226	1.00	53.81	7	S	N
ATOM	12174	N4	NCO	S	5	-21.216	15.747	-42.562	1.00	53.89	7	S	N
ATOM	12175	N5	NCO	S	5	-21.697	13.088	-43.082	1.00	53.67	7	S	N
ATOM	12176	N6	NCO	S	5	-23.583	14.992	-43.806	1.00	53.80	7	S	N
ATOM	12177	CO	NCO	S	6	-15.002	5.575	-46.612	1.00	48.33	27	S	CO
ATOM	12178	N1	NCO	S	6	-13.271	5.470	-47.534	1.00	47.28	7	S	N
ATOM	12179	N2	NCO	S	6	-15.685	6.613	-48.132	1.00	47.30	7	S	N
ATOM	12180	N3	NCO	S	6	-14.435	7.228	-45.754	1.00	47.26	7	S	N
ATOM	12181	N4	NCO	S	6	-14.302	4.510	-45.161	1.00	47.85	7	S	N
ATOM	12182	N5	NCO	S	6	-15.556	3.918	-47.481	1.00	47.46	7	S	N
ATOM	12183	N6	NCO	S	6	-16.753	5.778	-45.775	1.00	47.69	7	S	N
ATOM	12184	CO	NCO	S	7	22.010	-17.755	-9.805	1.00	80.79	27	S	CO
ATOM	12185	N1	NCO	S	7	21.650	-17.961	-11.719	1.00	80.58	7	S	N
ATOM	12186	N2	NCO	S	7	23.899	-17.492	-10.220	1.00	80.61	7	S	N
ATOM	12187	N3	NCO	S	7	22.324	-19.685	-9.690	1.00	80.58	7	S	N
ATOM	12188	N4	NCO	S	7	20.131	-18.032	-9.435	1.00	80.14	7	S	N
ATOM	12189	N5	NCO	S	7	21.723	-15.844	-9.951	1.00	80.18	7	S	N
ATOM	12190	N6	NCO	S	7	22.408	-17.603	-7.900	1.00	80.72	7	S	N
ATOM	12191	CO	NCO	S	8	-22.044	37.439	8.773	1.00	73.72	27	S	CO
ATOM	12192	N1	NCO	S	8	-20.470	37.771	7.648	1.00	73.98	7	S	N
ATOM	12193	N2	NCO	S	8	-23.073	37.020	7.172	1.00	74.39	7	S	N
ATOM	12194	N3	NCO	S	8	-22.516	39.319	8.606	1.00	74.51	7	S	N
ATOM	12195	N4	NCO	S	8	-20.997	37.859	10.356	1.00	74.45	7	S	N
ATOM	12196	N5	NCO	S	8	-21.564	35.557	8.922	1.00	73.87	7	S	N
ATOM	12197	N6	NCO	S	8	-23.618	37.137	9.878	1.00	74.89	7	S	N
ATOM	12198	CO	NCO	S	9	-8.174	-25.768	-21.367	1.00	26.91	27	S	CO
ATOM	12199	N1	NCO	S	9	-7.276	-27.245	-22.334	1.00	26.69	7	S	N
ATOM	12200	N2	NCO	S	9	-6.625	-24.622	-21.634	1.00	26.70	7	S	N
ATOM	12201	N3	NCO	S	9	-7.306	-26.378	-19.720	1.00	25.02	7	S	N
ATOM	12202	N4	NCO	S	9	-9.688	-26.935	-21.033	1.00	27.66	7	S	N
ATOM	12203	N5	NCO	S	9	-8.957	-25.164	-23.033	1.00	29.06	7	S	N
ATOM	12204	N6	NCO	S	9	-9.106	-24.362	-20.407	1.00	28.71	7	S	N
ATOM	12510	NA	IUM	T	1	-6.969	18.829	-30.755	1.00	25.31	11	T	NA
ATOM	12511	NA	IUM	T	2	-16.581	1.796	-26.993	1.00	27.86	11	T	NA
ATOM	12512	NA	IUM	T	3	12.095	7.286	3.912	1.00	22.01	11	T	NA
ATOM	12513	NA	IUM	T	4	-5.720	12.561	11.307	1.00	22.85	11	T	NA
ATOM	12206	C1	ETG	U	1	15.861	-10.557	-0.217	1.00	29.66	6	U	C
ATOM	12207	C2	ETG	U	1	16.737	-9.520	0.479	1.00	30.67	6	U	C
ATOM	12208	OH1	ETG	U	1	15.291	-11.482	0.698	1.00	34.73	8	U	O
ATOM	12209	OH2	ETG	U	1	16.096	-8.504	1.172	1.00	25.72	8	U	O
ATOM	12210	C1	ETG	U	2	-11.086	30.403	11.348	1.00	27.91	6	U	C
ATOM	12211	C2	ETG	U	2	-11.266	29.022	11.977	1.00	29.30	6	U	C
ATOM	12212	OH1	ETG	U	2	-10.057	31.186	11.854	1.00	29.87	8	U	O
ATOM	12213	OH2	ETG	U	2	-10.162	28.409	12.581	1.00	23.23	8	U	O
ATOM	12214	C1	ETG	U	3	-14.034	35.319	-25.697	1.00	32.62	6	U	C
ATOM	12215	C2	ETG	U	3	-13.841	33.859	-26.095	1.00	33.22	6	U	C
ATOM	12216	OH1	ETG	U	3	-15.351	35.444	-25.177	1.00	32.18	8	U	O
ATOM	12217	OH2	ETG	U	3	-13.326	33.628	-27.370	1.00	26.32	8	U	O
ATOM	12218	C1	ETG	U	4	-7.992	-14.686	-28.244	1.00	26.83	6	U	C
ATOM	12219	C2	ETG	U	4	-9.417	-14.334	-28.713	1.00	28.49	6	U	C
ATOM	12220	OH1	ETG	U	4	-7.115	-14.840	-29.323	1.00	28.63	8	U	O
ATOM	12221	OH2	ETG	U	4	-9.508	-13.059	-29.329	1.00	20.29	8	U	O
ATOM	12222	C1	ETG	U	5	-11.800	6.520	-6.843	1.00	31.85	6	U	C
ATOM	12223	C2	ETG	U	5	-12.486	6.870	-8.178	1.00	31.62	6	U	C
ATOM	12224	OH1	ETG	U	5	-10.411	6.899	-6.909	1.00	35.12	8	U	O
ATOM	12225	OH2	ETG	U	5	-11.639	7.814	-8.874	1.00	33.31	8	U	O
ATOM	12226	C1	ETG	U	6	-7.338	-6.276	-11.285	1.00	38.86	6	U	C
ATOM	12227	C2	ETG	U	6	-7.043	-5.459	-12.587	1.00	38.20	6	U	C
ATOM	12228	OH1	ETG	U	6	-8.706	-6.669	-11.379	1.00	39.06	8	U	O
ATOM	12229	OH2	ETG	U	6	-8.146	-5.854	-13.443	1.00	39.05	8	U	O
ATOM	12230	C1	ETG	U	7	3.623	13.617	-12.869	1.00	28.85	6	U	C
ATOM	12231	C2	ETG	U	7	3.399	13.378	-14.367	1.00	29.74	6	U	C
ATOM	12232	OH1	ETG	U	7	2.392	13.348	-12.178	1.00	30.96	8	U	O
ATOM	12233	OH2	ETG	U	7	2.370	12.388	-14.489	1.00	33.32	8	U	O
ATOM	12235	N1	FMN	Y	1	-14.055	11.313	18.508	1.00	24.33	7	Y	N
ATOM	12236	C2	FMN	Y	1	-15.043	11.719	19.365	1.00	24.86	6	Y	C
ATOM	12237	O2	FMN	Y	1	-15.145	12.871	19.691	1.00	23.88	8	Y	O

156/188

ATOM	12238	N3	FMN	Y	1	-15.930	10.746	19.830	1.00	23.62	7	Y	N
ATOM	12239	C4	FMN	Y	1	-15.956	9.469	19.577	1.00	23.96	6	Y	C
ATOM	12240	O4	FMN	Y	1	-16.772	8.664	20.031	1.00	23.37	8	Y	O
ATOM	12241	C4A	FMN	Y	1	-14.894	9.014	18.656	1.00	23.12	6	Y	C
ATOM	12242	N5	FMN	Y	1	-14.868	7.825	18.159	1.00	22.08	7	Y	N
ATOM	12243	C5A	FMN	Y	1	-13.826	7.434	17.330	1.00	18.19	6	Y	C
ATOM	12244	C6	FMN	Y	1	-13.649	6.069	16.997	1.00	19.25	6	Y	C
ATOM	12245	C7	FMN	Y	1	-12.626	5.641	16.168	1.00	21.99	6	Y	C
ATOM	12246	C7M	FMN	Y	1	-12.436	4.140	15.799	1.00	22.59	6	Y	C
ATOM	12247	C8	FMN	Y	1	-11.737	6.579	15.620	1.00	19.73	6	Y	C
ATOM	12248	C8M	FMN	Y	1	-10.606	6.109	14.710	1.00	19.69	6	Y	C
ATOM	12249	C9	FMN	Y	1	-11.897	7.942	15.933	1.00	17.95	6	Y	C
ATOM	12250	C9A	FMN	Y	1	-12.940	8.360	16.801	1.00	19.47	6	Y	C
ATOM	12251	N10	FMN	Y	1	-13.027	9.652	17.299	1.00	19.49	7	Y	N
ATOM	12252	C10	FMN	Y	1	-13.985	10.047	18.169	1.00	23.40	6	Y	C
ATOM	12253	C1'	FMN	Y	1	-12.130	10.738	16.813	1.00	20.15	6	Y	C
ATOM	12254	C2'	FMN	Y	1	-12.666	11.729	15.835	1.00	20.01	6	Y	C
ATOM	12255	O2'	FMN	Y	1	-13.295	11.038	14.710	1.00	21.35	8	Y	O
ATOM	12256	C3'	FMN	Y	1	-11.661	12.750	15.188	1.00	21.77	6	Y	C
ATOM	12257	O3'	FMN	Y	1	-10.759	13.400	16.165	1.00	19.90	8	Y	O
ATOM	12258	C4'	FMN	Y	1	-12.267	13.916	14.457	1.00	20.45	6	Y	C
ATOM	12259	O4'	FMN	Y	1	-13.038	13.472	13.326	1.00	21.25	8	Y	O
ATOM	12260	C5'	FMN	Y	1	-11.318	15.020	13.972	1.00	20.81	6	Y	C
ATOM	12261	O5'	FMN	Y	1	-10.264	14.439	13.104	1.00	18.20	8	Y	O
ATOM	12262	P	FMN	Y	1	-8.754	14.462	13.584	1.00	18.41	15	Y	P
ATOM	12263	O1P	FMN	Y	1	-8.642	14.075	15.033	1.00	17.98	8	Y	O
ATOM	12264	O2P	FMN	Y	1	-8.285	15.903	13.387	1.00	20.10	8	Y	O
ATOM	12265	O3P	FMN	Y	1	-8.119	13.444	12.603	1.00	18.95	8	Y	O
ATOM	12266	N1	FMN	Y	2	23.017	8.260	2.721	1.00	21.70	7	Y	N
ATOM	12267	C2	FMN	Y	2	24.282	7.758	2.652	1.00	21.91	6	Y	C
ATOM	12268	O2	FMN	Y	2	24.546	6.594	2.734	1.00	20.32	8	Y	O
ATOM	12269	N3	FMN	Y	2	25.331	8.685	2.449	1.00	21.75	7	Y	N
ATOM	12270	C4	FMN	Y	2	25.151	10.003	2.411	1.00	22.42	6	Y	C
ATOM	12271	O4	FMN	Y	2	26.096	10.781	2.299	1.00	23.51	8	Y	O
ATOM	12272	C4A	FMN	Y	2	23.792	10.533	2.470	1.00	22.69	6	Y	C
ATOM	12273	N5	FMN	Y	2	23.492	11.803	2.386	1.00	21.80	7	Y	N
ATOM	12274	C5A	FMN	Y	2	22.239	12.231	2.682	1.00	20.61	6	Y	C
ATOM	12275	C6	FMN	Y	2	21.919	13.622	2.585	1.00	19.45	6	Y	C
ATOM	12276	C7	FMN	Y	2	20.650	14.080	2.702	1.00	20.29	6	Y	C
ATOM	12277	C7M	FMN	Y	2	20.305	15.578	2.594	1.00	19.22	6	Y	C
ATOM	12278	C8	FMN	Y	2	19.560	13.185	2.918	1.00	18.44	6	Y	C
ATOM	12279	C8M	FMN	Y	2	18.166	13.806	3.056	1.00	17.81	6	Y	C
ATOM	12280	C9	FMN	Y	2	19.844	11.837	2.987	1.00	19.97	6	Y	C
ATOM	12281	C9A	FMN	Y	2	21.174	11.348	2.886	1.00	21.76	6	Y	C
ATOM	12282	N10	FMN	Y	2	21.503	10.008	2.808	1.00	21.91	7	Y	N
ATOM	12283	C10	FMN	Y	2	22.742	9.525	2.599	1.00	22.32	6	Y	C
ATOM	12284	C1'	FMN	Y	2	20.482	8.981	3.075	1.00	22.89	6	Y	C
ATOM	12285	C2'	FMN	Y	2	20.222	7.998	1.968	1.00	22.12	6	Y	C
ATOM	12286	O2'	FMN	Y	2	19.875	8.617	0.719	1.00	22.98	8	Y	O
ATOM	12287	C3'	FMN	Y	2	18.988	7.093	2.255	1.00	20.51	6	Y	C
ATOM	12288	O3'	FMN	Y	2	19.121	6.534	3.580	1.00	17.78	8	Y	O
ATOM	12289	C4'	FMN	Y	2	18.818	5.900	1.363	1.00	20.54	6	Y	C
ATOM	12290	O4'	FMN	Y	2	18.529	6.437	0.051	1.00	21.23	8	Y	O
ATOM	12291	C5'	FMN	Y	2	17.819	4.843	1.804	1.00	18.91	6	Y	C
ATOM	12292	O5'	FMN	Y	2	16.502	5.454	1.929	1.00	18.62	8	Y	O
ATOM	12293	P	FMN	Y	2	15.688	5.354	3.297	1.00	18.19	15	Y	P
ATOM	12294	O1P	FMN	Y	2	16.709	5.772	4.375	1.00	19.71	8	Y	O
ATOM	12295	O2P	FMN	Y	2	15.238	3.959	3.582	1.00	19.45	8	Y	O
ATOM	12296	O3P	FMN	Y	2	14.594	6.397	3.133	1.00	17.84	8	Y	O
ATOM	12297	N1	FMN	Y	3	-25.561	-4.526	-27.055	1.00	24.29	7	Y	N
ATOM	12298	C2	FMN	Y	3	-26.225	-5.697	-27.224	1.00	28.21	6	Y	C
ATOM	12299	O2	FMN	Y	3	-25.730	-6.708	-27.654	1.00	27.91	8	Y	O
ATOM	12300	N3	FMN	Y	3	-27.607	-5.725	-26.882	1.00	25.59	7	Y	N
ATOM	12301	C4	FMN	Y	3	-28.260	-4.667	-26.445	1.00	24.15	6	Y	C
ATOM	12302	O4	FMN	Y	3	-29.464	-4.783	-26.213	1.00	25.92	8	Y	O
ATOM	12303	C4A	FMN	Y	3	-27.560	-3.407	-26.233	1.00	24.83	6	Y	C
ATOM	12304	N5	FMN	Y	3	-28.074	-2.349	-25.658	1.00	23.66	7	Y	N
ATOM	12305	C5A	FMN	Y	3	-27.268	-1.222	-25.527	1.00	22.47	6	Y	C
ATOM	12306	C6	FMN	Y	3	-27.864	-0.019	-25.035	1.00	21.61	6	Y	C
ATOM	12307	C7	FMN	Y	3	-27.178	1.153	-24.889	1.00	22.43	6	Y	C
ATOM	12308	C7M	FMN	Y	3	-27.920	2.413	-24.352	1.00	19.90	6	Y	C
ATOM	12309	C8	FMN	Y	3	-25.807	1.220	-25.252	1.00	20.74	6	Y	C
ATOM	12310	C8M	FMN	Y	3	-25.044	2.517	-25.096	1.00	18.72	6	Y	C
ATOM	12311	C9	FMN	Y	3	-25.181	0.050	-25.741	1.00	19.91	6	Y	C
ATOM	12312	C9A	FMN	Y	3	-25.909	-1.149	-25.869	1.00	21.96	6	Y	C
ATOM	12313	N10	FMN	Y	3	-25.382	-2.353	-26.313	1.00	22.12	7	Y	N
ATOM	12314	C10	FMN	Y	3	-26.136	-3.449	-26.577	1.00	23.32	6	Y	C
ATOM	12315	C1'	FMN	Y	3	-23.980	-2.447	-26.832	1.00	21.37	6	Y	C
ATOM	12316	C2'	FMN	Y	3	-23.109	-3.420	-26.044	1.00	22.44	6	Y	C

157/188

ATOM	12317	O2'	FMN	Y	3	-23.119	-3.067	-24.631	1.00	19.21	8	Y	O
ATOM	12318	C3'	FMN	Y	3	-21.590	-3.302	-26.430	1.00	22.59	6	Y	C
ATOM	12319	O3'	FMN	Y	3	-21.402	-3.336	-27.872	1.00	22.16	8	Y	O
ATOM	12320	C4'	FMN	Y	3	-20.643	-4.291	-25.823	1.00	23.42	6	Y	C
ATOM	12321	O4'	FMN	Y	3	-20.575	-4.109	-24.382	1.00	23.28	8	Y	O
ATOM	12322	C5'	FMN	Y	3	-19.201	-4.269	-26.359	1.00	20.85	6	Y	C
ATOM	12323	O5'	FMN	Y	3	-18.640	-2.937	-26.206	1.00	18.98	8	Y	O
ATOM	12324	P	FMN	Y	3	-18.074	-2.175	-27.446	1.00	20.99	15	Y	P
ATOM	12325	O1P	FMN	Y	3	-19.151	-2.327	-28.560	1.00	19.37	8	Y	O
ATOM	12326	O2P	FMN	Y	3	-16.809	-2.791	-28.011	1.00	19.01	8	Y	O
ATOM	12327	O3P	FMN	Y	3	-17.902	-0.757	-26.956	1.00	21.02	8	Y	O
ATOM	12328	N1	FMN	Y	4	-0.363	25.244	-36.876	1.00	24.83	7	Y	N
ATOM	12329	C2	FMN	Y	4	0.029	26.379	-37.526	1.00	26.47	6	Y	C
ATOM	12330	O2	FMN	Y	4	-0.623	27.387	-37.469	1.00	26.40	8	Y	O
ATOM	12331	N3	FMN	Y	4	1.240	26.316	-38.267	1.00	23.03	7	Y	N
ATOM	12332	C4	FMN	Y	4	2.057	25.317	-38.444	1.00	23.17	6	Y	C
ATOM	12333	O4	FMN	Y	4	3.104	25.352	-39.148	1.00	20.82	8	Y	O
ATOM	12334	C4A	FMN	Y	4	1.634	24.109	-37.751	1.00	22.66	6	Y	C
ATOM	12335	N5	FMN	Y	4	2.355	23.013	-37.797	1.00	22.04	7	Y	N
ATOM	12336	C5A	FMN	Y	4	1.828	21.881	-37.191	1.00	19.56	6	Y	C
ATOM	12337	C6	FMN	Y	4	2.559	20.675	-37.279	1.00	19.40	6	Y	C
ATOM	12338	C7	FMN	Y	4	2.148	19.491	-36.720	1.00	18.39	6	Y	C
ATOM	12339	C7M	FMN	Y	4	3.001	18.239	-36.871	1.00	18.31	6	Y	C
ATOM	12340	C8	FMN	Y	4	0.920	19.440	-36.007	1.00	17.35	6	Y	C
ATOM	12341	C8M	FMN	Y	4	0.486	18.119	-35.394	1.00	16.64	6	Y	C
ATOM	12342	C9	FMN	Y	4	0.222	20.629	-35.909	1.00	17.69	6	Y	C
ATOM	12343	C9A	FMN	Y	4	0.626	21.840	-36.469	1.00	18.27	6	Y	C
ATOM	12344	N10	FMN	Y	4	-0.112	23.029	-36.454	1.00	20.36	7	Y	N
ATOM	12345	C10	FMN	Y	4	0.389	24.173	-36.980	1.00	21.78	6	Y	C
ATOM	12346	C1'	FMN	Y	4	-1.432	23.193	-35.829	1.00	20.11	6	Y	C
ATOM	12347	C2'	FMN	Y	4	-1.479	23.932	-34.513	1.00	20.08	6	Y	C
ATOM	12348	O2'	FMN	Y	4	-0.488	23.543	-33.531	1.00	21.20	8	Y	O
ATOM	12349	C3'	FMN	Y	4	-2.824	23.794	-33.719	1.00	21.91	6	Y	C
ATOM	12350	O3'	FMN	Y	4	-3.926	23.899	-34.681	1.00	22.70	8	Y	O
ATOM	12351	C4'	FMN	Y	4	-3.121	24.766	-32.604	1.00	19.70	6	Y	C
ATOM	12352	O4'	FMN	Y	4	-2.183	24.640	-31.530	1.00	19.68	8	Y	O
ATOM	12353	C5'	FMN	Y	4	-4.521	24.761	-32.000	1.00	18.55	6	Y	C
ATOM	12354	O5'	FMN	Y	4	-4.851	23.442	-31.425	1.00	19.30	8	Y	O
ATOM	12355	P	FMN	Y	4	-6.090	22.701	-32.037	1.00	21.36	15	Y	P
ATOM	12356	O1P	FMN	Y	4	-6.082	22.822	-33.549	1.00	21.09	8	Y	O
ATOM	12357	O2P	FMN	Y	4	-7.376	23.317	-31.557	1.00	18.34	8	Y	O
ATOM	12358	O3P	FMN	Y	4	-5.864	21.203	-31.646	1.00	18.47	8	Y	O
ATOM	12359	N1	FMN	Y	5	-16.349	10.765	-45.903	1.00	50.18	7	Y	N
ATOM	12360	C2	FMN	Y	5	-16.305	10.445	-44.585	1.00	49.06	6	Y	C
ATOM	12361	O2	FMN	Y	5	-16.181	9.321	-44.196	1.00	46.23	8	Y	O
ATOM	12362	N3	FMN	Y	5	-16.414	11.516	-43.678	1.00	49.39	7	Y	N
ATOM	12363	C4	FMN	Y	5	-16.541	12.799	-43.954	1.00	50.08	6	Y	C
ATOM	12364	O4	FMN	Y	5	-16.644	13.680	-43.095	1.00	48.99	8	Y	O
ATOM	12365	C4A	FMN	Y	5	-16.572	13.138	-45.380	1.00	50.34	6	Y	C
ATOM	12366	N5	FMN	Y	5	-16.685	14.369	-45.782	1.00	50.59	7	Y	N
ATOM	12367	C5A	FMN	Y	5	-16.461	14.604	-47.127	1.00	52.36	6	Y	C
ATOM	12368	C6	FMN	Y	5	-16.417	15.949	-47.598	1.00	52.81	6	Y	C
ATOM	12369	C7	FMN	Y	5	-16.300	16.267	-48.919	1.00	53.21	6	Y	C
ATOM	12370	C7M	FMN	Y	5	-16.247	17.742	-49.378	1.00	53.57	6	Y	C
ATOM	12371	C8	FMN	Y	5	-16.221	15.242	-49.893	1.00	53.61	6	Y	C
ATOM	12372	C8M	FMN	Y	5	-16.098	15.631	-51.361	1.00	53.43	6	Y	C
ATOM	12373	C9	FMN	Y	5	-16.263	13.919	-49.469	1.00	52.66	6	Y	C
ATOM	12374	C9A	FMN	Y	5	-16.391	13.600	-48.101	1.00	52.36	6	Y	C
ATOM	12375	N10	FMN	Y	5	-16.280	12.297	-47.617	1.00	52.06	7	Y	N
ATOM	12376	C10	FMN	Y	5	-16.458	12.011	-46.307	1.00	50.89	6	Y	C
ATOM	12377	C1'	FMN	Y	5	-16.478	11.187	-48.698	1.00	54.77	6	Y	C
ATOM	12378	C2'	FMN	Y	5	-17.891	11.079	-49.114	1.00	56.79	6	Y	C
ATOM	12379	O2'	FMN	Y	5	-18.805	10.771	-48.040	1.00	55.34	8	Y	O
ATOM	12380	C3'	FMN	Y	5	-18.166	9.981	-50.179	1.00	58.91	6	Y	C
ATOM	12381	O3'	FMN	Y	5	-19.228	9.006	-49.909	1.00	57.39	8	Y	O
ATOM	12382	C4'	FMN	Y	5	-16.925	9.149	-50.390	1.00	60.16	6	Y	C
ATOM	12383	O4'	FMN	Y	5	-16.256	9.663	-51.545	1.00	59.68	8	Y	O
ATOM	12384	C5'	FMN	Y	5	-17.157	7.674	-50.393	1.00	61.74	6	Y	C
ATOM	12385	O5'	FMN	Y	5	-17.700	7.115	-51.617	1.00	62.42	8	Y	O
ATOM	12386	P	FMN	Y	5	-17.141	5.639	-51.876	1.00	62.89	15	Y	P
ATOM	12387	O1P	FMN	Y	5	-18.306	4.826	-52.390	1.00	63.23	8	Y	O
ATOM	12388	O2P	FMN	Y	5	-16.688	5.149	-50.508	1.00	62.78	8	Y	O
ATOM	12389	O3P	FMN	Y	5	-15.993	5.904	-52.878	1.00	62.75	8	Y	O
ATOM	12390	N1	FMN	Y	6	-20.340	9.566	-44.415	1.00	49.89	7	Y	N
ATOM	12391	C2	FMN	Y	6	-19.390	9.972	-43.528	1.00	50.17	6	Y	C
ATOM	12392	O2	FMN	Y	6	-19.150	11.122	-43.267	1.00	49.77	8	Y	O
ATOM	12393	N3	FMN	Y	6	-18.586	8.980	-42.938	1.00	49.25	7	Y	N
ATOM	12394	C4	FMN	Y	6	-18.707	7.689	-43.135	1.00	50.48	6	Y	C
ATOM	12395	O4	FMN	Y	6	-18.044	6.805	-42.594	1.00	51.17	8	Y	O

158/188

ATOM	12396	C4A	FMN	Y	6	-19.744	7.240	-44.063	1.00	49.92	6	Y	C
ATOM	12397	N5	FMN	Y	6	-19.797	6.007	-44.445	1.00	50.02	7	Y	N
ATOM	12398	C5A	FMN	Y	6	-20.718	5.653	-45.404	1.00	50.95	6	Y	C
ATOM	12399	C6	FMN	Y	6	-20.976	4.270	-45.679	1.00	51.20	6	Y	C
ATOM	12400	C7	FMN	Y	6	-22.018	3.820	-46.433	1.00	51.79	6	Y	C
ATOM	12401	C7M	FMN	Y	6	-22.271	2.316	-46.701	1.00	51.44	6	Y	C
ATOM	12402	C8	FMN	Y	6	-22.924	4.759	-46.990	1.00	51.66	6	Y	C
ATOM	12403	C8M	FMN	Y	6	-24.085	4.301	-47.862	1.00	51.11	6	Y	C
ATOM	12404	C9	FMN	Y	6	-22.673	6.105	-46.758	1.00	51.22	6	Y	C
ATOM	12405	C9A	FMN	Y	6	-21.605	6.576	-45.974	1.00	50.49	6	Y	C
ATOM	12406	N10	FMN	Y	6	-21.561	7.869	-45.455	1.00	50.31	7	Y	N
ATOM	12407	C10	FMN	Y	6	-20.539	8.298	-44.672	1.00	50.32	6	Y	C
ATOM	12408	C1'	FMN	Y	6	-22.289	8.938	-46.191	1.00	49.34	6	Y	C
ATOM	12409	C2'	FMN	Y	6	-21.937	9.060	-47.649	1.00	48.30	6	Y	C
ATOM	12410	O2'	FMN	Y	6	-20.529	9.287	-47.836	1.00	46.12	8	Y	O
ATOM	12411	C3'	FMN	Y	6	-22.698	10.230	-48.351	1.00	47.24	6	Y	C
ATOM	12412	O3'	FMN	Y	6	-24.106	9.857	-48.495	1.00	46.46	8	Y	O
ATOM	12413	C4'	FMN	Y	6	-22.165	10.681	-49.674	1.00	48.19	6	Y	C
ATOM	12414	O4'	FMN	Y	6	-20.790	11.125	-49.523	1.00	46.25	8	Y	O
ATOM	12415	C5'	FMN	Y	6	-22.870	11.808	-50.432	1.00	48.53	6	Y	C
ATOM	12416	O5'	FMN	Y	6	-22.877	13.006	-49.590	1.00	50.17	8	Y	O
ATOM	12417	P	FMN	Y	6	-23.761	14.285	-49.973	1.00	50.99	15	Y	P
ATOM	12418	O1P	FMN	Y	6	-25.208	13.871	-50.148	1.00	50.95	8	Y	O
ATOM	12419	O2P	FMN	Y	6	-23.141	14.694	-51.322	1.00	50.57	8	Y	O
ATOM	12420	O3P	FMN	Y	6	-23.481	15.241	-48.794	1.00	50.00	8	Y	O
ATOM	12428	C1	EPS	Z	1	-17.877	9.543	16.790	1.00	26.44	6	Z	C
ATOM	12427	C2	EPS	Z	1	-19.046	9.777	17.578	1.00	32.66	6	Z	C
ATOM	12426	C3	EPS	Z	1	-19.900	8.766	18.070	1.00	36.79	6	Z	C
ATOM	12431	C4	EPS	Z	1	-19.142	7.558	17.943	1.00	33.14	6	Z	C
ATOM	12430	C5	EPS	Z	1	-18.773	7.334	16.577	1.00	29.86	6	Z	C
ATOM	12429	C6	EPS	Z	1	-17.693	8.214	16.271	1.00	27.43	6	Z	C
ATOM	12435	O1	EPS	Z	1	-20.867	8.683	17.234	1.00	40.05	8	Z	O
ATOM	12446	O2	EPS	Z	1	-19.855	6.649	18.537	1.00	32.07	8	Z	O
ATOM	12440	O3	EPS	Z	1	-18.363	6.025	16.421	1.00	26.88	8	Z	O
ATOM	12432	C7	EPS	Z	1	-16.938	10.423	16.211	1.00	23.80	6	Z	C
ATOM	12433	O4	EPS	Z	1	-16.888	11.733	16.196	1.00	24.11	8	Z	O
ATOM	12434	O5	EPS	Z	1	-15.855	10.093	15.518	1.00	19.74	8	Z	O
ATOM	12436	P	EPS	Z	1	-22.082	9.147	18.169	1.00	41.83	15	Z	P
ATOM	12437	O6	EPS	Z	1	-22.176	7.887	19.262	1.00	42.76	8	Z	O
ATOM	12438	O7	EPS	Z	1	-23.461	8.869	17.414	1.00	42.00	8	Z	O
ATOM	12439	O8	EPS	Z	1	-21.756	10.407	19.009	1.00	39.95	8	Z	O
ATOM	12441	C8	EPS	Z	1	-19.088	5.112	15.710	1.00	24.41	6	Z	C
ATOM	12442	C9	EPS	Z	1	-20.502	5.299	15.493	1.00	22.39	6	Z	C
ATOM	12443	C10	EPS	Z	1	-18.569	3.955	15.147	1.00	25.12	6	Z	C
ATOM	12445	O9	EPS	Z	1	-17.330	3.652	15.305	1.00	25.85	8	Z	O
ATOM	12444	O10	EPS	Z	1	-19.261	3.135	14.393	1.00	23.46	8	Z	O
ATOM	12449	C1	EPS	Z	2	24.719	10.151	-0.972	1.00	27.07	6	Z	C
ATOM	12448	C2	EPS	Z	2	26.148	10.158	-1.229	1.00	31.79	6	Z	C
ATOM	12447	C3	EPS	Z	2	27.003	11.258	-1.503	1.00	35.99	6	Z	C
ATOM	12452	C4	EPS	Z	2	26.191	12.285	-0.866	1.00	33.61	6	Z	C
ATOM	12451	C5	EPS	Z	2	24.964	12.449	-1.556	1.00	30.96	6	Z	C
ATOM	12450	C6	EPS	Z	2	24.066	11.440	-1.085	1.00	26.77	6	Z	C
ATOM	12456	O1	EPS	Z	2	27.062	11.692	-2.689	1.00	39.14	8	Z	O
ATOM	12467	O2	EPS	Z	2	26.964	13.304	-0.712	1.00	37.98	8	Z	O
ATOM	12461	O3	EPS	Z	2	24.445	13.712	-1.287	1.00	28.25	8	Z	O
ATOM	12453	C7	EPS	Z	2	23.705	9.203	-0.671	1.00	25.03	6	Z	C
ATOM	12454	O4	EPS	Z	2	23.633	7.897	-0.514	1.00	21.59	8	Z	O
ATOM	12455	O5	EPS	Z	2	22.385	9.500	-0.435	1.00	22.35	8	Z	O
ATOM	12457	P	EPS	Z	2	28.506	11.284	-3.147	1.00	36.91	15	Z	P
ATOM	12458	O6	EPS	Z	2	29.590	12.048	-2.157	1.00	37.91	8	Z	O
ATOM	12459	O7	EPS	Z	2	28.918	11.950	-4.509	1.00	37.39	8	Z	O
ATOM	12460	O8	EPS	Z	2	28.842	9.769	-2.872	1.00	39.39	8	Z	O
ATOM	12462	C8	EPS	Z	2	24.532	14.701	-2.233	1.00	25.10	6	Z	C
ATOM	12463	C9	EPS	Z	2	25.328	14.558	-3.415	1.00	23.07	6	Z	C
ATOM	12464	C10	EPS	Z	2	23.835	15.898	-2.109	1.00	23.75	6	Z	C
ATOM	12466	O9	EPS	Z	2	23.132	16.147	-1.064	1.00	24.15	8	Z	O
ATOM	12465	O10	EPS	Z	2	23.865	16.824	-3.023	1.00	23.23	8	Z	O
ATOM	12470	C1	EPS	Z	3	-27.588	-5.278	-23.157	1.00	31.56	6	Z	C
ATOM	12469	C2	EPS	Z	3	-28.538	-6.355	-23.055	1.00	36.26	6	Z	C
ATOM	12468	C3	EPS	Z	3	-29.896	-6.279	-22.680	1.00	39.06	6	Z	C
ATOM	12473	C4	EPS	Z	3	-30.090	-4.851	-22.773	1.00	36.04	6	Z	C
ATOM	12472	C5	EPS	Z	3	-29.230	-4.172	-21.859	1.00	31.52	6	Z	C
ATOM	12471	C6	EPS	Z	3	-27.952	-4.063	-22.473	1.00	29.85	6	Z	C
ATOM	12477	O1	EPS	Z	3	-29.945	-6.446	-21.424	1.00	42.46	8	Z	O
ATOM	12488	O2	EPS	Z	3	-31.370	-4.675	-22.588	1.00	37.76	8	Z	O
ATOM	12482	O3	EPS	Z	3	-29.787	-2.928	-21.649	1.00	28.21	8	Z	O
ATOM	12474	C7	EPS	Z	3	-26.213	-5.221	-23.506	1.00	29.33	6	Z	C
ATOM	12475	O4	EPS	Z	3	-25.391	-6.174	-23.849	1.00	26.76	8	Z	O
ATOM	12476	O5	EPS	Z	3	-25.405	-4.152	-23.590	1.00	23.10	8	Z	O

ATOM	12478	P	EPS	Z	3	-30.876	-7.706	-21.290	1.00	43.60	15	Z	P
ATOM	12479	O6	EPS	Z	3	-32.326	-7.262	-21.954	1.00	43.55	8	Z	O
ATOM	12480	O7	EPS	Z	3	-31.342	-7.911	-19.780	1.00	42.62	8	Z	O
ATOM	12481	O8	EPS	Z	3	-30.366	-8.914	-22.132	1.00	42.64	8	Z	O
ATOM	12483	C8	EPS	Z	3	-30.360	-2.457	-20.514	1.00	24.43	6	Z	C
ATOM	12484	C9	EPS	Z	3	-30.786	-3.430	-19.551	1.00	25.33	6	Z	C
ATOM	12485	C10	EPS	Z	3	-30.525	-1.124	-20.170	1.00	24.23	6	Z	C
ATOM	12487	O9	EPS	Z	3	-30.209	-0.162	-20.971	1.00	25.29	8	Z	O
ATOM	12486	O10	EPS	Z	3	-31.022	-0.701	-19.028	1.00	24.64	8	Z	O
ATOM	12491	C1	EPS	Z	4	3.880	25.861	-35.559	1.00	33.12	6	Z	C
ATOM	12490	C2	EPS	Z	4	4.650	26.937	-36.156	1.00	38.32	6	Z	C
ATOM	12489	C3	EPS	Z	4	5.903	26.872	-36.798	1.00	41.38	6	Z	C
ATOM	12494	C4	EPS	Z	4	5.960	25.449	-37.124	1.00	38.35	6	Z	C
ATOM	12493	C5	EPS	Z	4	5.898	24.658	-35.960	1.00	34.32	6	Z	C
ATOM	12492	C6	EPS	Z	4	4.547	24.585	-35.489	1.00	33.77	6	Z	C
ATOM	12498	O1	EPS	Z	4	6.843	26.998	-35.969	1.00	44.66	8	Z	O
ATOM	12509	O2	EPS	Z	4	7.049	25.372	-37.845	1.00	39.74	8	Z	O
ATOM	12503	O3	EPS	Z	4	6.403	23.398	-36.250	1.00	29.92	8	Z	O
ATOM	12495	C7	EPS	Z	4	2.639	25.800	-34.885	1.00	31.21	6	Z	C
ATOM	12496	O4	EPS	Z	4	1.817	26.786	-34.589	1.00	28.60	8	Z	O
ATOM	12497	O5	EPS	Z	4	1.937	24.786	-34.352	1.00	25.09	8	Z	O
ATOM	12499	P	EPS	Z	4	7.613	28.269	-36.497	1.00	44.79	15	Z	P
ATOM	12500	O6	EPS	Z	4	8.032	27.968	-38.051	1.00	43.72	8	Z	O
ATOM	12501	O7	EPS	Z	4	9.039	28.387	-35.807	1.00	41.87	8	Z	O
ATOM	12502	O8	EPS	Z	4	6.681	29.518	-36.551	1.00	43.75	8	Z	O
ATOM	12504	C8	EPS	Z	4	7.583	22.979	-35.665	1.00	26.35	6	Z	C
ATOM	12505	C9	EPS	Z	4	8.571	23.916	-35.246	1.00	25.03	6	Z	C
ATOM	12506	C10	EPS	Z	4	7.924	21.640	-35.487	1.00	26.15	6	Z	C
ATOM	12508	O9	EPS	Z	4	7.109	20.711	-35.896	1.00	25.29	8	Z	O
ATOM	12507	O10	EPS	Z	4	9.027	21.198	-34.927	1.00	22.81	8	Z	O
ATOM	12503	OWO	WAT	W	3	-23.290	27.125	-0.968	1.00	10.68	8		
ATOM	12504	OWO	WAT	W	4	-6.238	16.525	11.375	1.00	19.09	8		
ATOM	12505	OWO	WAT	W	5	5.035	28.625	-16.178	1.00	22.48	8		
ATOM	12506	OWO	WAT	W	6	23.124	-4.116	-13.818	1.00	11.09	8		
ATOM	12507	OWO	WAT	W	7	-15.056	-8.312	-8.323	1.00	25.33	8		
ATOM	12508	OWO	WAT	W	8	-15.941	32.758	-19.849	1.00	16.53	8		
ATOM	12509	OWO	WAT	W	9	-11.121	7.597	8.036	1.00	24.92	8		
ATOM	12510	OWO	WAT	W	10	15.907	-6.893	-17.221	1.00	14.40	8		
ATOM	12511	OWO	WAT	W	11	-23.547	-0.139	-12.960	1.00	18.12	8		
ATOM	12512	OWO	WAT	W	12	7.969	7.755	-31.896	1.00	15.19	8		
ATOM	12513	OWO	WAT	W	13	-13.696	9.433	-11.551	1.00	24.87	8		
ATOM	12514	OWO	WAT	W	14	11.435	6.094	-13.245	1.00	17.16	8		
ATOM	12515	OWO	WAT	W	15	4.604	16.696	-42.823	1.00	22.34	8		
ATOM	12516	OWO	WAT	W	16	-20.176	-4.268	-10.412	1.00	19.93	8		
ATOM	12517	OWO	WAT	W	17	-15.298	29.587	2.514	1.00	23.98	8		
ATOM	12518	OWO	WAT	W	18	-17.057	-12.145	-27.594	1.00	17.98	8		
ATOM	12519	OWO	WAT	W	19	-27.793	12.483	-17.319	1.00	19.11	8		
ATOM	12520	OWO	WAT	W	20	12.507	3.173	3.371	1.00	17.12	8		
ATOM	12521	OWO	WAT	W	21	1.442	-14.516	-13.664	1.00	20.45	8		
ATOM	12522	OWO	WAT	W	22	-15.686	27.803	-32.724	1.00	20.23	8		
ATOM	12523	OWO	WAT	W	23	2.230	23.696	-17.075	1.00	17.71	8		
ATOM	12524	OWO	WAT	W	24	-13.761	-3.486	-10.849	1.00	14.10	8		
ATOM	12525	OWO	WAT	W	25	16.070	6.253	-1.395	1.00	19.08	8		
ATOM	12526	OWO	WAT	W	26	8.939	16.782	-3.419	1.00	18.65	8		
ATOM	12527	OWO	WAT	W	27	17.434	-5.016	-15.612	1.00	22.07	8		
ATOM	12528	OWO	WAT	W	28	-33.192	4.092	-27.430	1.00	26.25	8		
ATOM	12529	OWO	WAT	W	29	4.129	10.221	-26.708	1.00	17.46	8		
ATOM	12530	OWO	WAT	W	30	5.127	-4.123	-12.400	1.00	20.46	8		
ATOM	12531	OWO	WAT	W	31	-5.030	-11.922	-17.846	1.00	18.46	8		
ATOM	12532	OWO	WAT	W	32	11.584	16.064	-34.481	1.00	18.90	8		
ATOM	12533	OWO	WAT	W	33	-8.101	22.083	-0.059	1.00	22.15	8		
ATOM	12534	OWO	WAT	W	34	-22.882	25.941	-33.313	1.00	24.11	8		
ATOM	12535	OWO	WAT	W	35	-19.540	8.674	-17.218	1.00	24.01	8		
ATOM	12536	OWO	WAT	W	36	-8.119	18.104	0.003	1.00	16.54	8		
ATOM	12537	OWO	WAT	W	37	-8.412	-16.620	-11.040	1.00	13.83	8		
ATOM	12538	OWO	WAT	W	38	21.620	22.217	-3.576	1.00	22.88	8		
ATOM	12539	OWO	WAT	W	39	-8.996	22.056	-29.589	1.00	18.97	8		
ATOM	12540	OWO	WAT	W	40	-21.280	27.951	-38.002	1.00	32.92	8		
ATOM	12541	OWO	WAT	W	41	18.595	-2.521	0.088	1.00	20.05	8		
ATOM	12542	OWO	WAT	W	42	-12.747	8.164	3.033	1.00	21.73	8		
ATOM	12543	OWO	WAT	W	43	15.993	24.609	17.210	1.00	23.41	8		
ATOM	12544	OWO	WAT	W	44	10.104	-11.569	-2.778	1.00	16.71	8		
ATOM	12545	OWO	WAT	W	45	-0.719	22.155	-27.305	1.00	21.01	8		
ATOM	12546	OWO	WAT	W	46	21.998	12.446	-14.354	1.00	20.32	8		
ATOM	12547	OWO	WAT	W	47	-14.282	-1.679	-27.767	1.00	22.37	8		
ATOM	12548	OWO	WAT	W	48	-7.502	-0.932	-18.507	1.00	22.03	8		
ATOM	12549	OWO	WAT	W	49	-12.899	22.388	13.174	1.00	17.84	8		
ATOM	12550	OWO	WAT	W	50	-21.599	10.210	-16.286	1.00	16.57	8		
ATOM	12551	OWO	WAT	W	51	1.721	11.034	-17.613	1.00	20.97	8		

160/188

ATOM	12552	OWO	WAT	W	52	-9.210	0.526	3.948	1.00	21.98	8
ATOM	12553	OWO	WAT	W	53	12.821	-9.490	-9.714	1.00	23.58	8
ATOM	12554	OWO	WAT	W	54	10.418	-7.498	13.346	1.00	21.71	8
ATOM	12555	OWO	WAT	W	55	19.771	5.505	-13.450	1.00	21.14	8
ATOM	12556	OWO	WAT	W	56	19.530	-2.777	6.335	1.00	19.31	8
ATOM	12557	OWO	WAT	W	57	-2.004	-13.758	-18.025	1.00	19.88	8
ATOM	12558	OWO	WAT	W	58	5.851	-2.025	-6.082	1.00	19.83	8
ATOM	12559	OWO	WAT	W	59	7.504	22.774	-27.051	1.00	21.46	8
ATOM	12560	OWO	WAT	W	60	11.157	12.143	-6.709	1.00	24.76	8
ATOM	12561	OWO	WAT	W	61	-23.469	-11.687	-8.429	1.00	20.04	8
ATOM	12562	OWO	WAT	W	62	10.942	32.136	-22.173	1.00	19.23	8
ATOM	12563	OWO	WAT	W	63	-15.126	38.052	-24.758	1.00	24.76	8
ATOM	12564	OWO	WAT	W	64	-19.707	17.301	4.902	1.00	26.96	8
ATOM	12565	OWO	WAT	W	65	-14.249	27.368	0.968	1.00	16.69	8
ATOM	12566	OWO	WAT	W	66	-32.423	4.540	-16.815	1.00	23.20	8
ATOM	12567	OWO	WAT	W	67	-28.414	11.370	1.089	1.00	23.20	8
ATOM	12568	OWO	WAT	W	68	-2.205	23.461	-11.049	1.00	18.75	8
ATOM	12569	OWO	WAT	W	69	-1.766	36.882	-13.323	1.00	15.39	8
ATOM	12570	OWO	WAT	W	70	-25.643	7.694	5.075	1.00	19.45	8
ATOM	12571	OWO	WAT	W	71	-17.923	2.761	-15.523	1.00	18.86	8
ATOM	12572	OWO	WAT	W	72	-6.251	-6.052	-30.612	1.00	14.16	8
ATOM	12573	OWO	WAT	W	73	-24.093	-4.072	-16.609	1.00	25.95	8
ATOM	12574	OWO	WAT	W	74	-6.777	23.863	-17.402	1.00	20.20	8
ATOM	12575	OWO	WAT	W	75	-0.158	8.818	-22.693	1.00	18.13	8
ATOM	12576	OWO	WAT	W	76	-16.213	-9.506	-32.756	1.00	23.16	8
ATOM	12577	OWO	WAT	W	77	14.980	-4.445	8.232	1.00	25.00	8
ATOM	12578	OWO	WAT	W	78	1.535	21.047	-24.719	1.00	19.45	8
ATOM	12579	OWO	WAT	W	79	-14.956	10.375	8.077	1.00	24.48	8
ATOM	12580	OWO	WAT	W	80	-31.823	15.582	-35.472	1.00	21.07	8
ATOM	12581	OWO	WAT	W	81	9.571	-5.964	4.117	1.00	17.02	8
ATOM	12582	OWO	WAT	W	82	-24.457	-10.180	0.748	1.00	18.72	8
ATOM	12583	OWO	WAT	W	83	21.345	-2.665	0.572	1.00	18.21	8
ATOM	12584	OWO	WAT	W	84	-15.986	-2.929	-30.566	1.00	17.55	8
ATOM	12585	OWO	WAT	W	85	-33.996	9.059	-2.207	1.00	22.30	8
ATOM	12586	OWO	WAT	W	86	-5.585	3.292	0.208	1.00	18.46	8
ATOM	12587	OWO	WAT	W	87	14.907	-9.769	4.579	1.00	21.97	8
ATOM	12588	OWO	WAT	W	88	23.958	6.902	-16.690	1.00	24.57	8
ATOM	12589	OWO	WAT	W	89	-8.692	3.146	3.693	1.00	17.38	8
ATOM	12590	OWO	WAT	W	90	-5.146	32.991	6.353	1.00	31.15	8
ATOM	12591	OWO	WAT	W	91	21.993	-5.571	12.459	1.00	22.93	8
ATOM	12592	OWO	WAT	W	92	-9.245	7.106	21.801	1.00	22.32	8
ATOM	12593	OWO	WAT	W	93	-9.892	24.179	-17.042	1.00	21.86	8
ATOM	12594	OWO	WAT	W	94	6.455	32.643	-24.046	1.00	22.32	8
ATOM	12595	OWO	WAT	W	95	23.774	24.015	-12.993	1.00	33.09	8
ATOM	12596	OWO	WAT	W	96	-7.832	30.945	-29.277	1.00	18.86	8
ATOM	12597	OWO	WAT	W	97	6.838	-7.427	-10.667	1.00	15.82	8
ATOM	12598	OWO	WAT	W	98	-17.931	-2.290	12.225	1.00	21.06	8
ATOM	12599	OWO	WAT	W	99	-13.863	30.799	-0.295	1.00	21.73	8
ATOM	12600	OWO	WAT	W	100	-2.465	-12.442	-25.822	1.00	15.36	8
ATOM	12601	OWO	WAT	W	101	-7.435	21.326	-18.207	1.00	17.63	8
ATOM	12602	OWO	WAT	W	102	-15.491	32.598	-5.496	1.00	20.00	8
ATOM	12603	OWO	WAT	W	103	-2.588	33.886	-40.109	1.00	32.41	8
ATOM	12604	OWO	WAT	W	104	4.220	25.115	-14.693	1.00	15.09	8
ATOM	12605	OWO	WAT	W	105	25.521	18.096	8.200	1.00	27.35	8
ATOM	12606	OWO	WAT	W	106	1.923	11.802	-25.907	1.00	22.11	8
ATOM	12607	OWO	WAT	W	107	-18.519	-3.170	-22.826	1.00	20.09	8
ATOM	12608	OWO	WAT	W	108	6.282	29.510	-21.764	1.00	22.52	8
ATOM	12609	OWO	WAT	W	109	-6.499	-17.461	-28.819	1.00	23.08	8
ATOM	12610	OWO	WAT	W	110	-23.781	-3.235	-1.426	1.00	24.79	8
ATOM	12611	OWO	WAT	W	111	14.937	2.447	5.773	1.00	14.77	8
ATOM	12612	OWO	WAT	W	112	7.265	24.784	-21.365	1.00	16.25	8
ATOM	12613	OWO	WAT	W	113	-22.802	16.127	-1.333	1.00	19.36	8
ATOM	12614	OWO	WAT	W	114	1.869	22.145	-27.407	1.00	22.49	8
ATOM	12615	OWO	WAT	W	115	5.867	1.931	-6.015	1.00	19.71	8
ATOM	12616	OWO	WAT	W	116	5.586	24.348	-28.376	1.00	22.36	8
ATOM	12617	OWO	WAT	W	117	9.635	19.513	-3.435	1.00	20.16	8
ATOM	12618	OWO	WAT	W	118	1.661	38.371	-20.984	1.00	18.76	8
ATOM	12619	OWO	WAT	W	119	-14.960	-10.452	-26.722	1.00	23.04	8
ATOM	12620	OWO	WAT	W	120	-28.967	13.223	4.632	1.00	18.60	8
ATOM	12621	OWO	WAT	W	121	-3.593	9.303	25.423	1.00	29.18	8
ATOM	12622	OWO	WAT	W	122	-19.892	14.532	-3.618	1.00	15.52	8
ATOM	12623	OWO	WAT	W	123	-17.395	14.085	-1.264	1.00	19.69	8
ATOM	12624	OWO	WAT	W	124	-2.005	5.093	-47.479	1.00	26.08	8
ATOM	12625	OWO	WAT	W	125	7.497	40.258	-21.955	1.00	26.36	8
ATOM	12626	OWO	WAT	W	126	3.721	18.214	-44.869	1.00	17.92	8
ATOM	12627	OWO	WAT	W	127	-20.325	2.643	-19.988	1.00	23.77	8
ATOM	12628	OWO	WAT	W	128	-12.266	13.798	10.659	1.00	21.33	8
ATOM	12629	OWO	WAT	W	129	2.027	17.598	-23.491	1.00	17.59	8
ATOM	12630	OWO	WAT	W	130	-8.824	31.392	5.651	1.00	14.86	8

161/188

ATOM	12631	OWO	WAT	W	131	-15.827	11.682	-16.378	1.00	19.12	8
ATOM	12632	OWO	WAT	W	132	-7.303	-3.545	-17.379	1.00	23.76	8
ATOM	12633	OWO	WAT	W	133	8.317	31.333	-22.282	1.00	30.71	8
ATOM	12634	OWO	WAT	W	134	-12.437	11.646	-19.851	1.00	23.58	8
ATOM	12635	OWO	WAT	W	135	10.773	-7.529	-9.727	1.00	18.26	8
ATOM	12636	OWO	WAT	W	136	-10.011	29.771	-12.848	1.00	20.94	8
ATOM	12637	OWO	WAT	W	137	-6.443	17.202	14.838	1.00	20.12	8
ATOM	12638	OWO	WAT	W	138	-10.960	30.142	-34.436	1.00	25.59	8
ATOM	12639	OWO	WAT	W	139	-3.672	25.773	9.924	1.00	21.32	8
ATOM	12640	OWO	WAT	W	140	28.056	-0.135	6.403	1.00	24.83	8
ATOM	12641	OWO	WAT	W	141	-21.304	10.400	2.421	1.00	15.43	8
ATOM	12642	OWO	WAT	W	142	-13.872	7.395	-12.710	1.00	34.49	8
ATOM	12643	OWO	WAT	W	143	23.585	19.354	6.437	1.00	20.95	8
ATOM	12644	OWO	WAT	W	144	-9.470	13.320	10.340	1.00	17.08	8
ATOM	12645	OWO	WAT	W	145	-5.026	8.777	-22.793	1.00	21.69	8
ATOM	12646	OWO	WAT	W	146	-1.750	19.072	-11.400	1.00	24.38	8
ATOM	12647	OWO	WAT	W	147	-4.892	-3.620	-19.376	1.00	19.42	8
ATOM	12648	OWO	WAT	W	148	22.049	12.727	8.920	1.00	19.25	8
ATOM	12649	OWO	WAT	W	149	-4.452	21.402	-29.296	1.00	22.35	8
ATOM	12650	OWO	WAT	W	150	2.373	26.795	17.305	1.00	21.49	8
ATOM	12651	OWO	WAT	W	151	11.744	5.729	-16.683	1.00	17.50	8
ATOM	12652	OWO	WAT	W	152	-33.982	2.539	-29.697	1.00	20.09	8
ATOM	12653	OWO	WAT	W	153	-39.482	11.312	-9.533	1.00	37.28	8
ATOM	12654	OWO	WAT	W	154	20.582	-1.190	-16.518	1.00	27.95	8
ATOM	12655	OWO	WAT	W	155	10.278	3.663	6.632	1.00	24.59	8
ATOM	12656	OWO	WAT	W	156	-10.373	-5.030	7.932	1.00	19.96	8
ATOM	12657	OWO	WAT	W	157	7.013	38.790	-27.889	1.00	25.68	8
ATOM	12658	OWO	WAT	W	158	7.411	0.274	-7.602	1.00	21.73	8
ATOM	12659	OWO	WAT	W	159	17.008	9.703	-13.188	1.00	18.52	8
ATOM	12660	OWO	WAT	W	160	-13.294	-4.631	-7.814	1.00	18.92	8
ATOM	12661	OWO	WAT	W	161	-30.099	17.414	-14.032	1.00	23.69	8
ATOM	12662	OWO	WAT	W	162	24.722	-0.422	-15.850	1.00	22.23	8
ATOM	12663	OWO	WAT	W	163	-6.804	32.827	-31.353	1.00	18.38	8
ATOM	12664	OWO	WAT	W	164	1.225	29.095	18.489	1.00	31.52	8
ATOM	12665	OWO	WAT	W	165	3.345	15.262	-9.055	1.00	31.99	8
ATOM	12666	OWO	WAT	W	166	18.074	15.176	-21.207	1.00	25.63	8
ATOM	12667	OWO	WAT	W	167	-20.701	-1.670	-18.504	1.00	22.82	8
ATOM	12668	OWO	WAT	W	168	-16.987	32.899	-28.479	1.00	24.87	8
ATOM	12669	OWO	WAT	W	169	-9.689	23.601	-32.776	1.00	15.94	8
ATOM	12670	OWO	WAT	W	170	-14.380	18.637	22.131	1.00	26.24	8
ATOM	12671	OWO	WAT	W	171	-11.038	-15.940	-12.292	1.00	23.49	8
ATOM	12672	OWO	WAT	W	172	2.528	-12.638	-15.055	1.00	18.70	8
ATOM	12673	OWO	WAT	W	173	-11.733	-7.158	-34.700	1.00	22.79	8
ATOM	12674	OWO	WAT	W	174	-9.437	22.299	18.342	1.00	25.70	8
ATOM	12675	OWO	WAT	W	175	-16.499	-8.856	-14.998	1.00	27.26	8
ATOM	12676	OWO	WAT	W	176	13.980	6.629	0.557	1.00	21.03	8
ATOM	12677	OWO	WAT	W	177	-6.012	20.581	-16.107	1.00	28.73	8
ATOM	12678	OWO	WAT	W	178	16.229	23.427	-17.400	1.00	19.29	8
ATOM	12679	OWO	WAT	W	179	-14.404	30.579	23.669	1.00	20.96	8
ATOM	12680	OWO	WAT	W	180	-27.978	5.109	-2.755	1.00	24.35	8
ATOM	12681	OWO	WAT	W	181	-0.200	18.913	-25.924	1.00	22.80	8
ATOM	12682	OWO	WAT	W	182	5.961	-1.544	-8.798	1.00	34.41	8
ATOM	12683	OWO	WAT	W	183	-25.775	-5.744	-9.145	1.00	17.58	8
ATOM	12684	OWO	WAT	W	184	22.723	11.035	-25.327	1.00	21.44	8
ATOM	12685	OWO	WAT	W	185	16.991	14.355	-9.364	1.00	19.41	8
ATOM	12686	OWO	WAT	W	186	0.506	-5.114	23.039	1.00	22.86	8
ATOM	12687	OWO	WAT	W	187	-8.993	42.528	-25.931	1.00	25.12	8
ATOM	12688	OWO	WAT	W	188	-12.272	0.300	20.873	1.00	20.01	8
ATOM	12689	OWO	WAT	W	189	-8.554	4.427	-14.772	1.00	32.39	8
ATOM	12690	OWO	WAT	W	190	-11.098	41.612	-18.685	1.00	23.66	8
ATOM	12691	OWO	WAT	W	191	-24.253	-2.362	-14.285	1.00	23.76	8
ATOM	12692	OWO	WAT	W	192	-19.822	-14.909	-1.139	1.00	25.85	8
ATOM	12693	OWO	WAT	W	193	11.041	2.910	18.874	1.00	40.02	8
ATOM	12694	OWO	WAT	W	194	5.338	7.644	-1.664	1.00	28.07	8
ATOM	12695	OWO	WAT	W	195	15.209	4.041	-16.933	1.00	24.48	8
ATOM	12696	OWO	WAT	W	196	7.745	-9.922	5.993	1.00	29.59	8
ATOM	12697	OWO	WAT	W	197	-12.550	32.495	-2.594	1.00	24.75	8
ATOM	12698	OWO	WAT	W	198	-8.864	4.907	-4.216	1.00	24.60	8
ATOM	12699	OWO	WAT	W	199	-19.336	9.306	9.345	1.00	21.21	8
ATOM	12700	OWO	WAT	W	200	-4.596	24.193	16.643	1.00	26.19	8
ATOM	12701	OWO	WAT	W	201	-7.075	29.703	13.932	1.00	25.01	8
ATOM	12702	OWO	WAT	W	202	-10.620	34.790	-8.366	1.00	21.15	8
ATOM	12703	OWO	WAT	W	203	4.302	16.807	-3.589	1.00	21.11	8
ATOM	12704	OWO	WAT	W	204	11.876	3.222	-31.005	1.00	28.29	8
ATOM	12705	OWO	WAT	W	205	32.851	-1.411	-3.548	1.00	21.52	8
ATOM	12706	OWO	WAT	W	206	-3.409	-0.801	-6.973	1.00	21.01	8
ATOM	12707	OWO	WAT	W	207	10.056	-13.334	-0.539	1.00	27.78	8
ATOM	12708	OWO	WAT	W	208	-12.349	-2.144	35.015	1.00	26.91	8
ATOM	12709	OWO	WAT	W	209	-14.815	33.420	-1.708	1.00	30.08	8

162/188

ATOM	12710	OWO	WAT	W	210	-16.802	26.649	-26.021	1.00	15.62	8
ATOM	12711	OWO	WAT	W	211	0.310	25.928	22.098	1.00	27.41	8
ATOM	12712	OWO	WAT	W	212	-1.662	6.233	0.527	1.00	21.37	8
ATOM	12713	OWO	WAT	W	213	-16.757	-11.602	-39.726	1.00	22.72	8
ATOM	12714	OWO	WAT	W	214	-24.635	-2.200	-6.503	1.00	17.38	8
ATOM	12715	OWO	WAT	W	215	3.963	32.940	13.193	1.00	33.52	8
ATOM	12716	OWO	WAT	W	216	18.133	30.378	-16.247	1.00	23.15	8
ATOM	12717	OWO	WAT	W	217	-21.078	9.842	14.948	1.00	24.95	8
ATOM	12718	OWO	WAT	W	218	-34.535	2.058	-7.690	1.00	21.85	8
ATOM	12719	OWO	WAT	W	219	-1.910	-9.579	-16.568	1.00	21.42	8
ATOM	12720	OWO	WAT	W	220	10.514	40.429	-26.479	1.00	29.76	8
ATOM	12721	OWO	WAT	W	221	-5.262	-14.521	-18.578	1.00	20.28	8
ATOM	12722	OWO	WAT	W	222	6.647	24.077	-48.641	1.00	49.91	8
ATOM	12723	OWO	WAT	W	223	-2.617	15.944	12.024	1.00	19.23	8
ATOM	12724	OWO	WAT	W	224	-26.154	-3.990	7.124	1.00	22.43	8
ATOM	12725	OWO	WAT	W	225	-16.242	-20.229	-35.831	1.00	28.78	8
ATOM	12726	OWO	WAT	W	226	1.442	2.650	-17.405	1.00	21.09	8
ATOM	12727	OWO	WAT	W	227	-17.344	17.913	11.946	1.00	26.96	8
ATOM	12728	OWO	WAT	W	228	6.517	23.147	-50.889	1.00	41.92	8
ATOM	12729	OWO	WAT	W	229	20.262	-16.489	-3.090	1.00	28.28	8
ATOM	12730	OWO	WAT	W	230	-12.102	27.528	-2.614	1.00	21.61	8
ATOM	12731	OWO	WAT	W	231	7.929	20.421	-25.478	1.00	20.19	8
ATOM	12732	OWO	WAT	W	232	-11.458	9.684	5.938	1.00	22.35	8
ATOM	12733	OWO	WAT	W	233	-29.668	9.702	2.751	1.00	30.29	8
ATOM	12734	OWO	WAT	W	234	-2.614	23.553	-29.063	1.00	20.68	8
ATOM	12735	OWO	WAT	W	235	-8.761	39.438	2.565	1.00	22.96	8
ATOM	12736	OWO	WAT	W	236	-18.656	-1.633	-20.371	1.00	25.58	8
ATOM	12737	OWO	WAT	W	237	13.669	34.859	-14.112	1.00	22.32	8
ATOM	12738	OWO	WAT	W	238	-38.859	16.597	-33.782	1.00	30.00	8
ATOM	12739	OWO	WAT	W	239	-14.032	29.801	-42.702	1.00	29.27	8
ATOM	12740	OWO	WAT	W	240	-16.013	-18.060	-14.319	1.00	22.76	8
ATOM	12741	OWO	WAT	W	241	-24.673	-18.625	-15.601	1.00	36.66	8
ATOM	12742	OWO	WAT	W	242	-8.326	25.462	-8.867	1.00	33.51	8
ATOM	12743	OWO	WAT	W	243	-15.717	-15.295	-10.579	1.00	24.41	8
ATOM	12744	OWO	WAT	W	244	12.907	25.029	-1.301	1.00	16.63	8
ATOM	12745	OWO	WAT	W	245	6.418	13.134	20.215	1.00	32.52	8
ATOM	12746	OWO	WAT	W	246	-12.068	24.201	-5.114	1.00	20.48	8
ATOM	12747	OWO	WAT	W	247	-4.688	12.354	2.456	1.00	26.61	8
ATOM	12748	OWO	WAT	W	248	-14.249	10.572	5.284	1.00	23.76	8
ATOM	12749	OWO	WAT	W	249	-28.786	20.792	5.856	1.00	23.74	8
ATOM	12750	OWO	WAT	W	250	5.751	2.554	-12.269	1.00	30.72	8
ATOM	12751	OWO	WAT	W	251	-18.177	35.300	6.456	1.00	25.35	8
ATOM	12752	OWO	WAT	W	252	-8.092	18.985	-45.225	1.00	29.63	8
ATOM	12753	OWO	WAT	W	253	-23.775	29.366	-26.274	1.00	34.69	8
ATOM	12754	OWO	WAT	W	254	17.614	25.070	5.814	1.00	37.57	8
ATOM	12755	OWO	WAT	W	255	-25.635	15.870	7.140	1.00	23.66	8
ATOM	12756	OWO	WAT	W	256	-2.277	20.966	-7.169	1.00	25.06	8
ATOM	12757	OWO	WAT	W	257	31.730	1.113	-14.767	1.00	37.81	8
ATOM	12758	OWO	WAT	W	258	-1.795	20.053	-41.945	1.00	17.68	8
ATOM	12759	OWO	WAT	W	259	-6.860	-5.189	-39.981	1.00	20.31	8
ATOM	12760	OWO	WAT	W	260	-24.534	5.197	1.483	1.00	21.57	8
ATOM	12761	OWO	WAT	W	261	3.341	10.061	-41.674	1.00	25.83	8
ATOM	12762	OWO	WAT	W	262	0.642	-19.748	-19.661	1.00	30.21	8
ATOM	12763	OWO	WAT	W	263	-4.414	-8.523	15.412	1.00	24.75	8
ATOM	12764	OWO	WAT	W	264	-13.585	-16.785	1.725	1.00	27.63	8
ATOM	12765	OWO	WAT	W	265	-24.422	-8.988	-8.649	1.00	22.83	8
ATOM	12766	OWO	WAT	W	266	5.500	1.797	-15.090	1.00	22.21	8
ATOM	12767	OWO	WAT	W	267	21.162	8.813	-19.077	1.00	27.95	8
ATOM	12768	OWO	WAT	W	268	0.596	17.810	-28.366	1.00	23.09	8
ATOM	12769	OWO	WAT	W	269	17.944	23.040	8.314	1.00	27.65	8
ATOM	12770	OWO	WAT	W	270	5.858	38.108	-21.098	1.00	26.94	8
ATOM	12771	OWO	WAT	W	271	-26.323	14.471	4.913	1.00	20.38	8
ATOM	12772	OWO	WAT	W	272	-26.258	21.453	2.604	1.00	25.38	8
ATOM	12773	OWO	WAT	W	273	7.148	-12.434	-15.146	1.00	21.48	8
ATOM	12774	OWO	WAT	W	274	4.301	-17.277	-25.572	1.00	24.36	8
ATOM	12775	OWO	WAT	W	275	-18.699	5.959	5.229	1.00	23.37	8
ATOM	12776	OWO	WAT	W	276	28.777	-2.111	-14.188	1.00	25.00	8
ATOM	12777	OWO	WAT	W	277	-8.815	32.218	-16.017	1.00	17.48	8
ATOM	12778	OWO	WAT	W	278	-12.435	35.121	-6.295	1.00	35.53	8
ATOM	12779	OWO	WAT	W	279	-12.139	33.280	11.647	1.00	21.47	8
ATOM	12780	OWO	WAT	W	280	20.746	29.913	16.596	1.00	23.29	8
ATOM	12781	OWO	WAT	W	281	4.696	30.388	-23.493	1.00	25.40	8
ATOM	12782	OWO	WAT	W	282	-19.765	-9.180	-11.524	1.00	25.48	8
ATOM	12783	OWO	WAT	W	283	-5.298	-21.430	-21.567	1.00	16.54	8
ATOM	12784	OWO	WAT	W	284	13.580	-1.380	-31.978	1.00	33.97	8
ATOM	12785	OWO	WAT	W	285	-31.857	21.881	-13.379	1.00	28.41	8
ATOM	12786	OWO	WAT	W	286	-10.886	34.114	-13.990	1.00	23.58	8
ATOM	12787	OWO	WAT	W	287	22.994	10.497	-18.699	1.00	37.78	8
ATOM	12788	OWO	WAT	W	288	-17.476	-0.695	-24.143	1.00	23.14	8

163/188

ATOM	12789	OWO	WAT	W	289	-7.044	-0.013	-15.947	1.00	23.88	8
ATOM	12790	OWO	WAT	W	290	-27.893	-7.006	-19.970	1.00	24.40	8
ATOM	12791	OWO	WAT	W	291	3.232	24.968	18.645	1.00	32.71	8
ATOM	12792	OWO	WAT	W	292	-18.448	8.663	22.304	1.00	27.32	8
ATOM	12793	OWO	WAT	W	293	0.912	10.461	-58.984	1.00	27.93	8
ATOM	12794	OWO	WAT	W	294	6.158	41.080	-24.302	1.00	26.73	8
ATOM	12795	OWO	WAT	W	295	-31.617	10.705	-27.616	1.00	21.84	8
ATOM	12796	OWO	WAT	W	296	34.673	-0.272	0.361	1.00	36.57	8
ATOM	12797	OWO	WAT	W	297	18.544	19.304	-32.160	1.00	30.68	8
ATOM	12798	OWO	WAT	W	298	-9.387	7.131	-10.163	1.00	28.17	8
ATOM	12799	OWO	WAT	W	299	9.312	-13.024	-11.529	1.00	27.93	8
ATOM	12800	OWO	WAT	W	300	-2.101	20.023	-13.968	1.00	27.51	8
ATOM	12801	OWO	WAT	W	301	31.107	7.617	8.757	1.00	24.80	8
ATOM	12802	OWO	WAT	W	302	-20.056	22.589	-35.288	1.00	27.59	8
ATOM	12803	OWO	WAT	W	303	-12.033	14.598	-5.014	1.00	27.73	8
ATOM	12804	OWO	WAT	W	304	-14.904	42.385	-34.970	1.00	27.93	8
ATOM	12805	OWO	WAT	W	305	10.796	2.332	-13.289	1.00	35.16	8
ATOM	12806	OWO	WAT	W	306	-11.932	14.500	-7.694	1.00	25.90	8
ATOM	12807	OWO	WAT	W	307	-14.730	8.964	-40.896	1.00	37.23	8
ATOM	12808	OWO	WAT	W	308	25.590	10.147	-4.058	1.00	27.18	8
ATOM	12809	OWO	WAT	W	309	26.761	-11.280	6.260	1.00	23.71	8
ATOM	12810	OWO	WAT	W	310	13.264	22.693	-21.678	1.00	18.98	8
ATOM	12811	OWO	WAT	W	311	-7.978	24.804	-15.257	1.00	29.10	8
ATOM	12812	OWO	WAT	W	312	-2.913	4.662	-1.372	1.00	28.82	8
ATOM	12813	OWO	WAT	W	313	3.991	35.614	-18.063	1.00	29.16	8
ATOM	12814	OWO	WAT	W	314	-10.334	-10.737	5.311	1.00	29.60	8
ATOM	12815	OWO	WAT	W	315	-12.827	32.049	-5.232	1.00	27.15	8
ATOM	12816	OWO	WAT	W	316	-9.111	14.017	-4.751	1.00	36.09	8
ATOM	12817	OWO	WAT	W	317	-13.924	8.198	9.552	1.00	27.67	8
ATOM	12818	OWO	WAT	W	318	-27.660	10.792	4.852	1.00	24.47	8
ATOM	12819	OWO	WAT	W	319	-11.590	19.382	-30.870	1.00	19.59	8
ATOM	12820	OWO	WAT	W	320	-14.027	-16.700	-11.939	1.00	34.00	8
ATOM	12821	OWO	WAT	W	321	7.593	-13.172	0.374	1.00	33.84	8
ATOM	12822	OWO	WAT	W	322	-23.091	25.268	1.394	1.00	27.84	8
ATOM	12823	OWO	WAT	W	323	14.004	29.253	-21.070	1.00	31.03	8
ATOM	12824	OWO	WAT	W	324	-12.602	17.475	-4.763	1.00	31.46	8
ATOM	12825	OWO	WAT	W	325	23.828	9.147	18.501	1.00	37.98	8
ATOM	12826	OWO	WAT	W	326	5.957	-13.059	-26.007	1.00	26.09	8
ATOM	12827	OWO	WAT	W	327	-16.597	10.361	-41.257	1.00	33.85	8
ATOM	12828	OWO	WAT	W	328	-4.273	37.236	-1.643	1.00	24.82	8
ATOM	12829	OWO	WAT	W	329	-10.362	21.841	-1.943	1.00	32.85	8
ATOM	12830	OWO	WAT	W	330	-12.887	12.205	8.253	1.00	18.79	8
ATOM	12831	OWO	WAT	W	331	-26.773	25.788	-30.549	1.00	38.08	8
ATOM	12832	OWO	WAT	W	332	33.173	-0.699	-6.100	1.00	34.35	8
ATOM	12833	OWO	WAT	W	333	4.877	13.293	-8.226	1.00	40.16	8
ATOM	12834	OWO	WAT	W	334	32.291	1.916	-5.586	1.00	30.38	8
ATOM	12835	OWO	WAT	W	335	21.235	2.541	-3.489	1.00	24.76	8
ATOM	12836	OWO	WAT	W	336	-7.210	6.584	-8.987	1.00	33.54	8
ATOM	12837	OWO	WAT	W	337	23.465	-12.604	-4.846	1.00	26.36	8
ATOM	12838	OWO	WAT	W	338	-8.974	8.992	-7.216	1.00	30.45	8
ATOM	12839	OWO	WAT	W	339	-12.338	1.656	23.469	1.00	23.36	8
ATOM	12840	OWO	WAT	W	340	5.703	16.704	21.518	1.00	30.33	8
ATOM	12841	OWO	WAT	W	341	15.314	-6.100	15.507	1.00	34.16	8
ATOM	12842	OWO	WAT	W	342	-25.741	1.780	-38.119	1.00	27.70	8
ATOM	12843	OWO	WAT	W	343	-13.163	-3.554	-42.105	1.00	31.00	8
ATOM	12844	OWO	WAT	W	344	-37.967	14.584	-6.372	1.00	26.25	8
ATOM	12845	OWO	WAT	W	345	-10.406	41.552	0.895	1.00	41.15	8
ATOM	12846	OWO	WAT	W	346	29.885	0.950	-11.689	1.00	20.71	8
ATOM	12847	OWO	WAT	W	347	-10.412	19.803	-0.098	1.00	25.43	8
ATOM	12848	OWO	WAT	W	348	7.648	-11.761	-24.611	1.00	28.62	8
ATOM	12849	OWO	WAT	W	349	-13.778	-21.783	-36.051	1.00	29.84	8
ATOM	12850	OWO	WAT	W	350	-14.373	18.252	-6.711	1.00	22.02	8
ATOM	12851	OWO	WAT	W	351	-14.694	22.564	15.693	1.00	23.43	8
ATOM	12852	OWO	WAT	W	352	2.668	29.069	-34.137	1.00	33.66	8
ATOM	12853	OWO	WAT	W	353	5.371	-0.692	-14.300	1.00	25.73	8
ATOM	12854	OWO	WAT	W	354	13.605	12.290	-2.139	1.00	20.95	8
ATOM	12855	OWO	WAT	W	355	-2.518	-10.646	-31.396	1.00	28.36	8
ATOM	12856	OWO	WAT	W	356	-15.583	32.139	-39.801	1.00	18.72	8
ATOM	12857	OWO	WAT	W	357	-31.498	2.591	7.239	1.00	30.30	8
ATOM	12858	OWO	WAT	W	358	22.198	5.808	-14.882	1.00	23.13	8
ATOM	12859	OWO	WAT	W	359	-13.048	17.634	-11.152	1.00	23.76	8
ATOM	12860	OWO	WAT	W	360	-23.873	14.541	3.980	1.00	27.24	8
ATOM	12861	OWO	WAT	W	361	-25.032	-9.083	-5.168	1.00	31.17	8
ATOM	12862	OWO	WAT	W	362	-7.371	33.299	7.117	1.00	27.33	8
ATOM	12863	OWO	WAT	W	363	-21.302	28.295	-25.417	1.00	39.59	8
ATOM	12864	OWO	WAT	W	364	-21.660	-20.708	-13.863	1.00	31.15	8
ATOM	12865	OWO	WAT	W	365	21.178	24.130	22.328	1.00	22.35	8
ATOM	12866	OWO	WAT	W	366	12.420	10.363	-3.782	1.00	25.50	8
ATOM	12867	OWO	WAT	W	367	7.151	-16.914	-19.611	1.00	24.43	8

164/188

ATOM	12868	OWO	WAT	W	368	-9.285	34.697	-16.765	1.00	26.48	8
ATOM	12869	OWO	WAT	W	369	-36.118	23.448	-24.406	1.00	29.73	8
ATOM	12870	OWO	WAT	W	370	-31.367	-2.508	-25.957	1.00	34.84	8
ATOM	12871	OWO	WAT	W	371	27.905	23.545	23.800	1.00	23.13	8
ATOM	12872	OWO	WAT	W	372	5.111	-11.949	-13.323	1.00	21.94	8
ATOM	12873	OWO	WAT	W	373	-18.111	-7.804	-42.566	1.00	48.58	8
ATOM	12874	OWO	WAT	W	374	11.052	36.839	-4.989	1.00	70.48	8
ATOM	12875	OWO	WAT	W	375	-19.461	4.791	28.093	1.00	42.28	8
ATOM	12876	OWO	WAT	W	376	23.031	4.126	-12.648	1.00	26.46	8
ATOM	12877	OWO	WAT	W	377	-6.727	25.254	24.461	1.00	21.51	8
ATOM	12878	OWO	WAT	W	378	25.358	0.637	6.505	1.00	27.93	8
ATOM	12879	OWO	WAT	W	379	-5.046	-4.440	-16.865	1.00	38.97	8
ATOM	12880	OWO	WAT	W	380	1.738	-1.145	36.438	1.00	29.69	8
ATOM	12881	OWO	WAT	W	381	10.085	-10.611	-10.406	1.00	23.42	8
ATOM	12882	OWO	WAT	W	382	-7.619	26.837	-11.220	1.00	23.90	8
ATOM	12883	OWO	WAT	W	383	20.832	9.856	15.136	1.00	32.13	8
ATOM	12884	OWO	WAT	W	384	17.289	-15.210	-8.747	1.00	29.09	8
ATOM	12885	OWO	WAT	W	385	-9.446	45.948	21.166	1.00	27.47	8
ATOM	12886	OWO	WAT	W	386	19.322	35.894	10.492	1.00	45.92	8
ATOM	12887	OWO	WAT	W	387	22.806	-0.476	-17.636	1.00	23.36	8
ATOM	12888	OWO	WAT	W	388	6.322	32.837	-34.288	1.00	31.21	8
ATOM	12889	OWO	WAT	W	389	-12.975	17.311	-17.284	1.00	34.71	8
ATOM	12890	OWO	WAT	W	390	7.894	-19.355	-4.932	1.00	21.13	8
ATOM	12891	OWO	WAT	W	391	18.430	35.625	-10.566	1.00	24.68	8
ATOM	12892	OWO	WAT	W	392	-19.799	7.359	7.293	1.00	23.79	8
ATOM	12893	OWO	WAT	W	393	-31.265	18.027	-22.579	1.00	26.03	8
ATOM	12894	OWO	WAT	W	394	11.050	-5.420	15.318	1.00	38.64	8
ATOM	12895	OWO	WAT	W	395	-20.941	-19.961	-11.064	1.00	28.68	8
ATOM	12896	OWO	WAT	W	396	-7.699	-7.632	19.438	1.00	40.51	8
ATOM	12897	OWO	WAT	W	397	2.429	-3.873	-13.752	1.00	33.22	8
ATOM	12898	OWO	WAT	W	398	-0.553	29.525	-46.191	1.00	34.05	8
ATOM	12899	OWO	WAT	W	399	-14.153	33.320	22.735	1.00	29.98	8
ATOM	12900	OWO	WAT	W	400	18.734	14.840	-15.949	1.00	19.42	8
ATOM	12901	OWO	WAT	W	401	-17.070	-2.545	23.440	1.00	44.09	8
ATOM	12902	OWO	WAT	W	402	-8.435	0.272	-11.608	1.00	26.11	8
ATOM	12903	OWO	WAT	W	403	1.865	13.695	-0.546	1.00	25.88	8
ATOM	12904	OWO	WAT	W	404	-2.656	11.830	-17.946	1.00	29.35	8
ATOM	12905	OWO	WAT	W	405	-22.241	-9.288	-5.489	1.00	28.84	8
ATOM	12906	OWO	WAT	W	406	-18.387	-0.660	-16.832	1.00	24.83	8
ATOM	12907	OWO	WAT	W	407	7.991	-12.515	8.023	1.00	32.25	8
ATOM	12908	OWO	WAT	W	408	31.140	-3.753	-3.745	1.00	29.00	8
ATOM	12909	OWO	WAT	W	409	27.503	7.796	-3.553	1.00	33.51	8
ATOM	12910	OWO	WAT	W	410	-14.734	19.706	-1.820	1.00	34.88	8
ATOM	12911	OWO	WAT	W	411	7.282	-10.078	-10.679	1.00	28.19	8
ATOM	12912	OWO	WAT	W	412	12.126	29.521	-19.283	1.00	29.58	8
ATOM	12913	OWO	WAT	W	413	-11.488	-6.937	-42.248	1.00	35.79	8
ATOM	12914	OWO	WAT	W	414	-4.079	-16.826	-29.892	1.00	32.57	8
ATOM	12915	OWO	WAT	W	415	5.101	30.193	-34.488	1.00	38.55	8
ATOM	12916	OWO	WAT	W	416	-19.150	13.591	-41.814	1.00	55.65	8
ATOM	12917	OWO	WAT	W	417	32.265	-9.106	-5.847	1.00	28.90	8
ATOM	12918	OWO	WAT	W	418	32.905	16.188	7.345	1.00	40.87	8
ATOM	12919	OWO	WAT	W	419	-0.006	31.875	11.740	1.00	31.01	8
ATOM	12920	OWO	WAT	W	420	6.670	-12.518	-11.264	1.00	23.12	8
ATOM	12921	OWO	WAT	W	421	-20.006	31.127	-24.030	1.00	32.12	8
ATOM	12922	OWO	WAT	W	422	-4.417	25.104	-10.814	1.00	25.07	8
ATOM	12923	OWO	WAT	W	423	-22.522	24.224	-35.493	1.00	43.28	8
ATOM	12924	OWO	WAT	W	424	11.416	30.784	-3.149	1.00	29.71	8
ATOM	12925	OWO	WAT	W	425	25.379	6.704	-1.821	1.00	29.28	8
ATOM	12926	OWO	WAT	W	426	-18.740	36.480	-20.685	1.00	26.99	8
ATOM	12927	OWO	WAT	W	427	-4.288	-19.620	22.937	1.00	34.52	8
ATOM	12928	OWO	WAT	W	428	16.332	9.728	-4.840	1.00	27.32	8
ATOM	12929	OWO	WAT	W	429	-3.898	25.697	-13.830	1.00	35.56	8
ATOM	12930	OWO	WAT	W	430	-11.694	15.078	-17.135	1.00	37.35	8
ATOM	12931	OWO	WAT	W	431	-1.620	-13.274	-28.218	1.00	32.01	8
ATOM	12932	OWO	WAT	W	432	12.147	26.117	-24.264	1.00	22.35	8
ATOM	12933	OWO	WAT	W	433	22.932	6.272	-26.929	1.00	29.44	8
ATOM	12934	OWO	WAT	W	434	-6.713	1.293	-9.634	1.00	23.59	8
ATOM	12935	OWO	WAT	W	435	-2.437	-6.563	-13.931	1.00	23.04	8
ATOM	12936	OWO	WAT	W	436	5.073	3.744	-40.300	1.00	37.48	8
ATOM	12937	OWO	WAT	W	437	-1.410	16.899	-8.436	1.00	37.12	8
ATOM	12938	OWO	WAT	W	438	19.360	23.359	24.437	1.00	29.06	8
ATOM	12939	OWO	WAT	W	439	-32.084	11.360	-24.131	1.00	42.59	8
ATOM	12940	OWO	WAT	W	440	13.725	-15.350	-14.783	1.00	35.80	8
ATOM	12941	OWO	WAT	W	441	-25.312	-2.051	12.306	1.00	32.96	8
ATOM	12942	OWO	WAT	W	442	30.107	13.802	-0.246	1.00	41.64	8
ATOM	12943	OWO	WAT	W	443	-26.124	-20.082	-12.357	1.00	33.05	8
ATOM	12944	OWO	WAT	W	444	-10.224	10.278	-53.986	1.00	26.36	8
ATOM	12945	OWO	WAT	W	445	-7.202	-2.195	-12.107	1.00	32.90	8
ATOM	12946	OWO	WAT	W	446	-6.268	-3.264	-9.649	1.00	18.64	8

165/188

ATOM	12947	OWO	WAT	W	447	-21.779	-11.091	-10.430	1.00	31.22	8
ATOM	12948	OWO	WAT	W	448	6.371	27.532	-33.539	1.00	30.74	8
ATOM	12949	OWO	WAT	W	449	13.904	9.601	-6.377	1.00	22.29	8
ATOM	12950	OWO	WAT	W	450	-25.288	23.702	2.628	1.00	39.26	8
ATOM	12951	OWO	WAT	W	451	-18.010	37.355	-23.568	1.00	46.34	8
ATOM	12952	OWO	WAT	W	452	9.042	0.223	-11.920	1.00	38.19	8
ATOM	12953	OWO	WAT	W	453	12.725	29.658	5.521	1.00	29.45	8
ATOM	12954	OWO	WAT	W	454	-8.132	6.924	-18.074	1.00	34.03	8
ATOM	12955	OWO	WAT	W	455	-21.185	37.110	-19.719	1.00	38.95	8
ATOM	12956	OWO	WAT	W	456	-41.127	9.755	-42.779	1.00	47.09	8
ATOM	12957	OWO	WAT	W	457	-0.339	-8.235	-37.700	1.00	55.30	8
ATOM	12958	OWO	WAT	W	458	11.631	29.461	-23.108	1.00	28.81	8
ATOM	12959	OWO	WAT	W	459	-29.621	19.395	12.293	1.00	26.39	8
ATOM	12960	OWO	WAT	W	460	-11.764	41.084	5.237	1.00	33.25	8
ATOM	12961	OWO	WAT	W	461	25.153	-2.808	-21.279	1.00	37.41	8
ATOM	12962	OWO	WAT	W	462	9.852	6.042	18.718	1.00	46.47	8
ATOM	12963	OWO	WAT	W	463	16.697	11.635	-3.119	1.00	29.78	8
ATOM	12964	OWO	WAT	W	464	-4.899	3.319	-7.169	1.00	42.09	8
ATOM	12965	OWO	WAT	W	465	16.936	29.387	8.473	1.00	32.95	8
ATOM	12966	OWO	WAT	W	466	-12.965	34.082	-11.148	1.00	27.87	8
ATOM	12967	OWO	WAT	W	467	17.922	30.434	-36.958	1.00	29.97	8
ATOM	12968	OWO	WAT	W	468	11.937	-0.973	15.909	1.00	51.72	8
ATOM	12969	OWO	WAT	W	469	-16.029	-18.302	-1.130	1.00	31.89	8
ATOM	12970	OWO	WAT	W	470	27.827	-12.041	8.845	1.00	40.55	8
ATOM	12971	OWO	WAT	W	471	27.448	-2.470	15.146	1.00	40.38	8
ATOM	12972	OWO	WAT	W	472	-9.433	39.616	5.422	1.00	35.15	8
ATOM	12973	OWO	WAT	W	473	-21.354	-10.305	12.571	1.00	34.18	8
ATOM	12974	OWO	WAT	W	474	25.867	-13.870	5.652	1.00	27.38	8
ATOM	12975	OWO	WAT	W	475	6.200	36.879	-18.879	1.00	32.47	8
ATOM	12976	OWO	WAT	W	476	-3.732	11.777	-2.049	1.00	33.67	8
ATOM	12977	OWO	WAT	W	477	-31.775	9.960	4.205	1.00	43.10	8
ATOM	12978	OWO	WAT	W	478	-8.088	-12.312	-32.591	1.00	27.28	8
ATOM	12979	OWO	WAT	W	479	-11.939	-22.182	-25.349	1.00	22.42	8
ATOM	12980	OWO	WAT	W	480	-33.901	21.086	-3.955	1.00	28.74	8
ATOM	12981	OWO	WAT	W	481	-18.538	33.716	-21.011	1.00	36.38	8
ATOM	12982	OWO	WAT	W	482	-33.466	15.723	-2.403	1.00	32.07	8
ATOM	12983	OWO	WAT	W	483	-20.082	32.528	13.427	1.00	28.94	8
ATOM	12984	OWO	WAT	W	484	-4.188	16.243	-16.162	1.00	35.75	8
ATOM	12985	OWO	WAT	W	485	-33.373	20.619	-7.607	1.00	37.97	8
ATOM	12986	OWO	WAT	W	486	-17.844	-16.650	-9.381	1.00	26.16	8
ATOM	12987	OWO	WAT	W	487	-16.866	17.869	-1.435	1.00	35.57	8
ATOM	12988	OWO	WAT	W	488	-12.911	-28.428	-22.543	1.00	36.41	8
ATOM	12989	OWO	WAT	W	489	11.894	-15.092	-12.734	1.00	35.71	8
ATOM	12990	OWO	WAT	W	490	19.292	12.734	-8.535	1.00	24.58	8
ATOM	12991	OWO	WAT	W	491	32.972	25.281	10.627	1.00	50.81	8
ATOM	12992	OWO	WAT	W	492	-16.828	-0.695	26.914	1.00	26.57	8
ATOM	12993	OWO	WAT	W	493	21.205	21.879	-22.576	1.00	38.73	8
ATOM	12994	OWO	WAT	W	494	-45.463	19.876	3.749	1.00	65.35	8
ATOM	12995	OWO	WAT	W	495	-17.904	14.471	-40.251	1.00	34.72	8
ATOM	12996	OWO	WAT	W	496	-34.559	16.492	-25.558	1.00	26.83	8
ATOM	12997	OWO	WAT	W	497	-32.297	24.083	-22.193	1.00	44.82	8
ATOM	12998	OWO	WAT	W	498	-12.214	32.834	-8.926	1.00	30.72	8
ATOM	12999	OWO	WAT	W	499	-18.012	1.601	-18.732	1.00	26.00	8
ATOM	13000	OWO	WAT	W	500	-31.836	-8.374	-33.666	1.00	31.53	8
ATOM	13001	OWO	WAT	W	501	-6.233	-9.711	17.083	1.00	29.74	8
ATOM	13002	OWO	WAT	W	502	27.315	-1.346	-16.505	1.00	32.16	8
ATOM	13003	OWO	WAT	W	503	-0.019	44.227	-17.731	1.00	45.03	8
ATOM	13004	OWO	WAT	W	504	-12.942	9.933	-42.830	1.00	39.25	8
ATOM	13005	OWO	WAT	W	505	-26.889	15.217	-40.465	1.00	37.10	8
ATOM	13006	OWO	WAT	W	506	-0.566	-18.865	-17.286	1.00	30.59	8
ATOM	13007	OWO	WAT	W	507	-15.807	-6.131	30.378	1.00	46.05	8
ATOM	13008	OWO	WAT	W	508	-0.133	13.104	-13.776	1.00	38.84	8
ATOM	13009	OWO	WAT	W	509	-33.281	20.939	17.955	1.00	30.90	8
ATOM	13010	OWO	WAT	W	510	30.113	10.353	-21.163	1.00	43.09	8
ATOM	13011	OWO	WAT	W	511	-25.134	21.849	-33.985	1.00	39.16	8
ATOM	13012	OWO	WAT	W	512	-7.296	-22.274	-27.715	1.00	32.74	8
ATOM	13013	OWO	WAT	W	513	1.784	29.372	-21.914	1.00	25.80	8
ATOM	13014	OWO	WAT	W	514	1.689	-13.230	-17.297	1.00	29.08	8
ATOM	13015	OWO	WAT	W	515	-1.755	27.016	-13.823	1.00	36.53	8
ATOM	13016	OWO	WAT	W	516	25.209	14.164	-21.851	1.00	51.95	8
ATOM	13017	OWO	WAT	W	517	-26.828	19.439	-35.988	1.00	31.81	8
ATOM	13018	OWO	WAT	W	518	-25.843	15.888	-51.770	1.00	24.12	8
ATOM	13019	OWO	WAT	W	519	3.007	5.519	-13.899	1.00	31.37	8
ATOM	13020	OWO	WAT	W	520	-37.245	18.501	-8.350	1.00	31.56	8
ATOM	13021	OWO	WAT	W	521	-10.192	34.672	18.542	1.00	35.00	8
ATOM	13022	OWO	WAT	W	522	21.888	27.203	9.178	1.00	42.20	8
ATOM	13023	OWO	WAT	W	523	6.510	2.626	-38.075	1.00	30.17	8
ATOM	13024	OWO	WAT	W	524	10.801	12.237	19.190	1.00	37.84	8
ATOM	13025	OWO	WAT	W	525	-22.363	0.094	-19.676	1.00	31.93	8

166/188

ATOM	13026	OWO	WAT	W	526	-4.805	-2.286	-13.410	1.00	27.02	8
ATOM	13027	OWO	WAT	W	527	-21.088	12.673	-38.506	1.00	33.81	8
ATOM	13028	OWO	WAT	W	528	-30.509	22.122	-20.823	1.00	34.49	8
ATOM	13029	OWO	WAT	W	529	26.945	-15.458	3.682	1.00	28.69	8
ATOM	13030	OWO	WAT	W	530	8.260	-3.019	-33.668	1.00	30.98	8
ATOM	13031	OWO	WAT	W	531	10.123	14.520	18.167	1.00	36.37	8
ATOM	13032	OWO	WAT	W	532	5.502	-14.526	-15.876	1.00	23.56	8
ATOM	13033	OWO	WAT	W	533	-6.996	-3.445	18.151	1.00	22.04	8
ATOM	13034	OWO	WAT	W	534	-13.563	20.817	-6.345	1.00	29.26	8
ATOM	13035	OWO	WAT	W	535	-20.710	-15.539	5.138	1.00	28.26	8
ATOM	13036	OWO	WAT	W	536	-33.045	19.304	10.963	1.00	26.51	8
ATOM	13037	OWO	WAT	W	537	2.320	22.332	17.833	1.00	26.54	8
ATOM	13038	OWO	WAT	W	538	-2.823	2.902	-21.503	1.00	31.48	8
ATOM	13039	OWO	WAT	W	539	-0.248	-8.792	-49.589	1.00	61.34	8
ATOM	13040	OWO	WAT	W	540	-8.882	17.068	-2.367	1.00	39.34	8
ATOM	13041	OWO	WAT	W	541	23.291	7.008	20.723	1.00	44.91	8
ATOM	13042	OWO	WAT	W	542	10.270	33.203	23.248	1.00	34.31	8
ATOM	13043	OWO	WAT	W	543	-25.866	-3.396	10.043	1.00	34.70	8
ATOM	13044	OWO	WAT	W	544	-13.215	0.996	-30.295	1.00	25.15	8
ATOM	13045	OWO	WAT	W	545	-6.960	-20.764	19.542	1.00	35.81	8
ATOM	13046	OWO	WAT	W	546	-13.935	5.275	-41.329	1.00	50.06	8
ATOM	13047	OWO	WAT	W	547	3.055	20.701	19.943	1.00	49.21	8
ATOM	13048	OWO	WAT	W	548	-25.831	-8.651	-23.183	1.00	27.12	8
ATOM	13049	OWO	WAT	W	549	18.233	-0.231	-28.950	1.00	41.27	8
ATOM	13050	OWO	WAT	W	550	20.264	10.530	-6.910	1.00	29.13	8
ATOM	13051	OWO	WAT	W	551	23.293	19.330	-35.591	1.00	44.35	8
ATOM	13052	OWO	WAT	W	552	7.763	12.176	-43.151	1.00	59.33	8
ATOM	13053	OWO	WAT	W	553	19.554	18.165	-29.208	1.00	28.93	8
ATOM	13054	OWO	WAT	W	554	7.268	-5.659	16.496	1.00	60.43	8
ATOM	13055	OWO	WAT	W	555	19.251	40.182	-18.627	1.00	73.79	8
ATOM	13056	OWO	WAT	W	556	29.292	6.318	-5.128	1.00	21.34	8
ATOM	13057	OWO	WAT	W	557	-31.874	16.286	-15.544	1.00	40.06	8
ATOM	13058	OWO	WAT	W	558	-25.156	14.197	16.582	1.00	34.23	8
ATOM	13059	OWO	WAT	W	559	0.154	-15.550	-17.343	1.00	35.02	8
ATOM	13060	OWO	WAT	W	560	29.594	-5.384	12.272	1.00	39.55	8
ATOM	13061	OWO	WAT	W	561	-14.524	-20.179	-2.864	1.00	56.99	8
ATOM	13062	OWO	WAT	W	562	-6.918	19.756	-28.179	1.00	33.42	8
ATOM	13063	OWO	WAT	W	563	14.960	8.019	-3.393	1.00	20.60	8
ATOM	13064	OWO	WAT	W	564	31.042	7.429	18.026	1.00	38.98	8
ATOM	13065	OWO	WAT	W	565	-19.818	-27.896	-29.482	1.00	42.91	8
ATOM	13066	OWO	WAT	W	566	9.308	0.320	-14.388	1.00	34.91	8
ATOM	13067	OWO	WAT	W	567	6.371	35.052	-41.763	1.00	63.15	8
ATOM	13068	OWO	WAT	W	568	2.489	14.406	-20.122	1.00	34.06	8
ATOM	13069	OWO	WAT	W	569	26.506	-19.783	-3.954	1.00	46.08	8
ATOM	13070	OWO	WAT	W	570	29.429	1.398	4.579	1.00	23.88	8
ATOM	13071	OWO	WAT	W	571	-11.042	17.193	-15.764	1.00	41.69	8
ATOM	13072	OWO	WAT	W	572	24.895	-14.988	-7.112	1.00	44.79	8
ATOM	13073	OWO	WAT	W	573	34.417	24.423	13.552	1.00	41.69	8
ATOM	13074	OWO	WAT	W	574	-28.682	20.635	3.151	1.00	27.89	8
ATOM	13075	OWO	WAT	W	575	-17.066	44.747	-23.917	1.00	42.49	8
ATOM	13076	OWO	WAT	W	576	-5.957	-6.657	17.744	1.00	39.50	8
ATOM	13077	OWO	WAT	W	577	-1.594	-9.011	-35.558	1.00	34.95	8
ATOM	13078	OWO	WAT	W	578	6.591	35.171	11.535	1.00	26.01	8
ATOM	13079	OWO	WAT	W	579	24.736	19.156	27.429	1.00	43.90	8
ATOM	13080	OWO	WAT	W	580	8.503	40.696	-37.502	1.00	61.49	8
ATOM	13081	OWO	WAT	W	581	24.180	26.303	-4.093	1.00	31.37	8
ATOM	13082	OWO	WAT	W	582	-5.305	-9.565	12.461	1.00	29.44	8
ATOM	13083	OWO	WAT	W	583	13.172	-3.402	-33.924	1.00	40.14	8
ATOM	13084	OWO	WAT	W	584	-15.270	10.403	28.942	1.00	36.72	8
ATOM	13085	OWO	WAT	W	585	8.391	20.229	-48.323	1.00	34.12	8
ATOM	13086	OWO	WAT	W	586	9.791	35.270	-2.028	1.00	28.94	8
ATOM	13087	OWO	WAT	W	587	-3.593	-5.899	35.648	1.00	30.25	8
ATOM	13088	OWO	WAT	W	588	22.975	9.452	-15.893	1.00	28.11	8
ATOM	13089	OWO	WAT	W	589	-26.206	-10.975	-5.898	1.00	39.93	8
ATOM	13090	OWO	WAT	W	590	-22.849	15.680	6.076	1.00	28.83	8
ATOM	13091	OWO	WAT	W	591	-13.250	0.488	38.009	1.00	28.66	8
ATOM	13092	OWO	WAT	W	592	-35.122	9.019	-25.254	1.00	52.71	8
ATOM	13093	OWO	WAT	W	593	8.278	-0.597	-32.598	1.00	40.50	8
ATOM	13094	OWO	WAT	W	594	-19.060	-17.820	-11.515	1.00	25.31	8
ATOM	13095	OWO	WAT	W	595	-3.163	-22.830	-20.519	1.00	30.38	8
ATOM	13096	OWO	WAT	W	596	10.884	-2.790	13.983	1.00	27.97	8
ATOM	13097	OWO	WAT	W	597	27.445	17.550	-16.956	1.00	30.11	8
ATOM	13098	OWO	WAT	W	598	19.430	-11.738	-12.415	1.00	36.72	8
ATOM	13099	OWO	WAT	W	599	-19.164	12.861	16.234	1.00	30.12	8
ATOM	13100	OWO	WAT	W	600	-28.710	-2.889	1.903	1.00	35.63	8
ATOM	13101	OWO	WAT	W	601	1.621	-17.114	-4.772	1.00	33.35	8
ATOM	13102	OWO	WAT	W	602	28.055	-4.728	-14.447	1.00	32.91	8
ATOM	13103	OWO	WAT	W	603	-2.614	29.324	19.736	1.00	40.21	8
ATOM	13104	OWO	WAT	W	604	-4.495	-4.834	-10.960	1.00	32.92	8

167/188

ATOM	13105	OWO	WAT	W	605	-3.584	5.148	-20.609	1.00	34.11	8
ATOM	13106	OWO	WAT	W	606	35.987	6.744	-9.319	1.00	37.04	8
ATOM	13107	OWO	WAT	W	607	-28.301	-12.377	-20.379	1.00	36.08	8
ATOM	13108	OWO	WAT	W	608	22.349	4.508	-25.033	1.00	25.90	8
ATOM	13109	OWO	WAT	W	609	-31.985	16.879	-25.678	1.00	34.79	8
ATOM	13110	OWO	WAT	W	610	1.108	15.600	-3.066	1.00	28.73	8
ATOM	13111	OWO	WAT	W	611	-1.767	18.982	-1.609	1.00	33.66	8
ATOM	13112	OWO	WAT	W	612	-23.714	-20.451	-24.401	1.00	29.55	8
ATOM	13113	OWO	WAT	W	613	-1.673	38.137	-1.654	1.00	33.42	8
ATOM	13114	OWO	WAT	W	614	-22.491	33.142	-5.207	1.00	41.11	8
ATOM	13115	OWO	WAT	W	615	30.391	4.929	17.345	1.00	30.44	8
ATOM	13116	OWO	WAT	W	616	5.121	5.338	-11.914	1.00	28.64	8
ATOM	13117	OWO	WAT	W	617	16.357	34.323	-13.647	1.00	25.92	8
ATOM	13118	OWO	WAT	W	618	30.089	16.703	22.417	1.00	26.11	8
ATOM	13119	OWO	WAT	W	619	29.702	24.753	9.087	1.00	45.26	8
ATOM	13120	OWO	WAT	W	620	17.832	44.755	-31.596	1.00	69.99	8
ATOM	13121	OWO	WAT	W	621	-5.930	21.754	26.306	1.00	31.15	8
ATOM	13122	OWO	WAT	W	622	7.431	33.564	2.488	1.00	31.48	8
ATOM	13123	OWO	WAT	W	623	5.100	29.795	14.940	1.00	35.74	8
ATOM	13124	OWO	WAT	W	624	-3.430	17.712	-14.685	1.00	28.02	8
ATOM	13125	OWO	WAT	W	625	0.284	41.255	-33.542	1.00	33.07	8
ATOM	13126	OWO	WAT	W	626	-14.042	42.770	-24.241	1.00	37.44	8
ATOM	13127	OWO	WAT	W	627	-21.334	-14.170	1.312	1.00	27.77	8
ATOM	13128	OWO	WAT	W	628	-9.337	-28.649	-28.267	1.00	39.45	8
ATOM	13129	OWO	WAT	W	629	-4.854	-8.225	34.461	1.00	38.53	8
ATOM	13130	OWO	WAT	W	630	34.260	14.202	21.993	1.00	43.70	8
ATOM	13131	OWO	WAT	W	631	-13.044	17.234	-50.658	1.00	36.72	8
ATOM	13132	OWO	WAT	W	632	23.603	-2.911	-18.789	1.00	34.56	8
ATOM	13133	OWO	WAT	W	633	17.885	32.812	-15.469	1.00	37.80	8
ATOM	13134	OWO	WAT	W	634	-20.273	31.636	-20.186	1.00	37.85	8
ATOM	13135	OWO	WAT	W	635	30.006	18.122	-15.599	1.00	28.70	8
ATOM	13136	OWO	WAT	W	636	-35.547	0.823	-10.497	1.00	47.92	8
ATOM	13137	OWO	WAT	W	637	-6.031	8.265	-3.480	1.00	28.62	8
ATOM	13138	OWO	WAT	W	638	10.838	36.754	-7.748	1.00	36.42	8
ATOM	13139	OWO	WAT	W	639	-0.579	36.161	-16.127	1.00	32.03	8
ATOM	13140	OWO	WAT	W	640	26.225	-18.472	4.892	1.00	43.93	8
ATOM	13141	OWO	WAT	W	641	-14.814	34.889	-7.058	1.00	32.06	8
ATOM	13142	OWO	WAT	W	642	23.044	-2.264	13.909	1.00	33.46	8
ATOM	13143	OWO	WAT	W	643	-18.367	13.944	13.804	1.00	22.59	8
ATOM	13144	OWO	WAT	W	644	17.422	19.719	-41.391	1.00	45.11	8
ATOM	13145	OWO	WAT	W	645	-3.191	39.345	-14.991	1.00	41.78	8
ATOM	13146	OWO	WAT	W	646	1.797	11.772	-6.574	1.00	28.33	8
ATOM	13147	OWO	WAT	W	647	-16.068	36.250	12.502	1.00	33.77	8
ATOM	13148	OWO	WAT	W	648	-2.920	-15.895	15.152	1.00	38.10	8
ATOM	13149	OWO	WAT	W	649	-17.096	-20.294	-12.347	1.00	45.37	8
ATOM	13150	OWO	WAT	W	650	-27.002	29.658	-21.942	1.00	53.07	8
ATOM	13151	OWO	WAT	W	651	-20.798	20.077	17.553	1.00	27.83	8
ATOM	13152	OWO	WAT	W	652	14.119	28.161	8.443	1.00	28.90	8
ATOM	13153	OWO	WAT	W	653	36.431	14.406	12.671	1.00	35.23	8
ATOM	13154	OWO	WAT	W	654	-9.405	-7.673	17.454	1.00	49.34	8
ATOM	13155	OWO	WAT	W	655	-24.452	-13.113	-32.736	1.00	42.95	8
ATOM	13156	OWO	WAT	W	656	-23.089	-11.134	-31.877	1.00	36.54	8
ATOM	13157	OWO	WAT	W	657	13.053	19.545	21.500	1.00	49.46	8
ATOM	13158	OWO	WAT	W	658	4.790	3.126	-8.217	1.00	30.55	8
ATOM	13159	OWO	WAT	W	659	-38.034	2.776	-44.069	1.00	32.84	8
ATOM	13160	OWO	WAT	W	660	-5.311	-24.835	-28.363	1.00	46.21	8
ATOM	13161	OWO	WAT	W	661	34.835	10.304	-7.611	1.00	50.50	8
ATOM	13162	OWO	WAT	W	662	-1.159	-15.948	-28.331	1.00	28.47	8
ATOM	13163	OWO	WAT	W	663	11.711	-16.916	-10.729	1.00	29.96	8
ATOM	13164	OWO	WAT	W	664	28.066	11.707	-20.522	1.00	54.13	8
ATOM	13165	OWO	WAT	W	665	-27.532	29.465	18.953	1.00	50.39	8
ATOM	13166	OWO	WAT	W	666	7.443	38.778	17.030	1.00	40.48	8
ATOM	13167	OWO	WAT	W	667	-12.697	49.106	-26.706	1.00	45.15	8
ATOM	13168	OWO	WAT	W	668	13.001	-13.158	-20.646	1.00	67.82	8
ATOM	13169	OWO	WAT	W	669	4.297	4.409	-51.266	1.00	35.43	8
ATOM	13170	OWO	WAT	W	670	-41.746	-4.796	-44.261	1.00	34.70	8
ATOM	13171	OWO	WAT	W	671	31.524	20.729	7.995	1.00	54.90	8
ATOM	13172	OWO	WAT	W	672	-24.652	13.908	-41.099	1.00	46.61	8
ATOM	13173	OWO	WAT	W	673	-33.753	-3.652	-23.700	1.00	38.47	8
ATOM	13174	OWO	WAT	W	674	-41.005	-3.469	-46.502	1.00	60.43	8
ATOM	13175	OWO	WAT	W	675	-20.228	-27.631	-34.736	1.00	36.97	8
ATOM	13176	OWO	WAT	W	676	-8.901	21.782	-8.650	1.00	44.42	8
ATOM	13177	OWO	WAT	W	677	-37.789	-5.379	-29.313	1.00	50.39	8
ATOM	13178	OWO	WAT	W	678	-28.012	0.793	-31.638	1.00	31.89	8
ATOM	13179	OWO	WAT	W	679	-13.744	39.657	-13.058	1.00	35.55	8
ATOM	13180	OWO	WAT	W	680	-14.783	42.362	10.125	1.00	30.29	8
ATOM	13181	OWO	WAT	W	681	-36.872	9.516	-27.181	1.00	39.53	8
ATOM	13182	OWO	WAT	W	682	19.190	-16.568	5.512	1.00	35.20	8
ATOM	13183	OWO	WAT	W	683	-30.607	27.761	-25.913	1.00	25.28	8

168/188

ATOM	13184	OWO	WAT	W	684	3.318	6.151	-9.938	1.00	34.60	8
ATOM	13185	OWO	WAT	W	685	35.484	8.928	-9.660	1.00	38.56	8
ATOM	13186	OWO	WAT	W	686	16.366	-24.955	6.560	1.00	32.95	8
ATOM	13187	OWO	WAT	W	687	-1.064	16.629	-2.277	1.00	32.23	8
ATOM	13188	OWO	WAT	W	688	28.155	1.118	17.916	1.00	39.87	8
ATOM	13189	OWO	WAT	W	689	38.038	12.490	11.104	1.00	48.62	8
ATOM	13190	OWO	WAT	W	690	21.556	-0.798	-26.513	1.00	35.77	8
ATOM	13191	OWO	WAT	W	691	7.694	-3.889	-48.309	1.00	55.61	8
ATOM	13192	OWO	WAT	W	692	26.397	9.755	-22.108	1.00	43.51	8
ATOM	13193	OWO	WAT	W	693	-8.540	-5.213	16.233	1.00	52.30	8
ATOM	13194	OWO	WAT	W	694	-1.474	30.125	-29.141	1.00	29.95	8
ATOM	13195	OWO	WAT	W	695	5.638	-1.614	-11.640	1.00	34.78	8
ATOM	13196	OWO	WAT	W	696	27.797	26.594	-10.794	1.00	40.37	8
ATOM	13197	OWO	WAT	W	697	13.978	8.795	-40.140	1.00	42.12	8
ATOM	13198	OWO	WAT	W	698	4.491	23.005	-40.164	1.00	38.07	8
ATOM	13199	OWO	WAT	W	699	8.456	28.032	19.936	1.00	29.05	8
ATOM	13200	OWO	WAT	W	700	-3.295	-10.485	26.014	1.00	37.71	8
ATOM	13201	OWO	WAT	W	701	-26.275	-12.860	-30.844	1.00	36.48	8
ATOM	13202	OWO	WAT	W	702	-21.141	-13.502	9.420	1.00	23.89	8
ATOM	13203	OWO	WAT	W	703	-13.188	40.786	-36.671	1.00	31.09	8
ATOM	13204	OWO	WAT	W	704	35.272	16.555	-9.414	1.00	34.00	8
ATOM	13205	OWO	WAT	W	705	-31.893	25.966	-8.117	1.00	35.73	8
ATOM	13206	OWO	WAT	W	706	-8.139	-11.256	15.698	1.00	37.75	8
ATOM	13207	OWO	WAT	W	707	-3.328	26.227	-15.960	1.00	42.57	8
ATOM	13208	OWO	WAT	W	708	-3.183	22.464	-13.321	1.00	34.57	8
ATOM	13209	OWO	WAT	W	709	-12.360	44.712	14.737	1.00	55.71	8
ATOM	13210	OWO	WAT	W	710	9.403	32.452	4.784	1.00	42.09	8
ATOM	13211	OWO	WAT	W	711	-33.043	-6.287	-6.207	1.00	29.71	8
ATOM	13212	OWO	WAT	W	712	25.266	-4.851	-15.520	1.00	37.90	8
ATOM	13213	OWO	WAT	W	713	-35.447	-6.678	-7.374	1.00	30.39	8
ATOM	13214	OWO	WAT	W	714	5.117	37.241	-1.866	1.00	40.04	8
ATOM	13215	OWO	WAT	W	715	26.159	-3.892	-17.869	1.00	41.34	8
ATOM	13216	OWO	WAT	W	716	3.257	1.538	31.873	1.00	43.99	8
ATOM	13217	OWO	WAT	W	717	-0.847	29.819	10.047	1.00	38.10	8
ATOM	13218	OWO	WAT	W	718	4.604	-19.348	-10.608	1.00	26.33	8
ATOM	13219	OWO	WAT	W	719	-15.717	18.992	26.287	1.00	32.81	8
ATOM	13220	OWO	WAT	W	720	-43.649	4.524	-10.956	1.00	36.70	8
ATOM	13221	OWO	WAT	W	721	14.558	24.027	-45.096	1.00	52.58	8
ATOM	13222	OWO	WAT	W	722	-6.439	-16.166	20.341	1.00	40.60	8
ATOM	13223	OWO	WAT	W	723	6.856	-17.053	-16.702	1.00	30.51	8
ATOM	13224	OWO	WAT	W	724	17.666	2.768	-10.771	1.00	23.91	8
ATOM	13225	OWO	WAT	W	725	-18.575	33.482	-24.071	1.00	43.96	8
ATOM	13226	OWO	WAT	W	726	-6.127	18.564	-57.365	1.00	47.71	8
ATOM	13227	OWO	WAT	W	727	-28.134	-5.805	10.761	1.00	59.28	8
ATOM	13228	OWO	WAT	W	728	11.219	0.349	-31.901	1.00	48.72	8
ATOM	13229	OWO	WAT	W	729	-14.224	44.741	-33.700	1.00	40.43	8
ATOM	13230	OWO	WAT	W	730	20.112	-3.424	-15.913	1.00	46.63	8
ATOM	13231	OWO	WAT	W	731	1.869	36.967	-17.931	1.00	32.48	8
ATOM	13232	OWO	WAT	W	732	-3.781	32.553	17.803	1.00	49.71	8
ATOM	13233	OWO	WAT	W	733	0.098	-5.106	-53.249	1.00	56.19	8
ATOM	13234	OWO	WAT	W	734	-5.458	2.080	-14.085	1.00	42.90	8
ATOM	13235	OWO	WAT	W	735	-13.267	14.441	-51.309	1.00	45.90	8
ATOM	13236	OWO	WAT	W	736	26.770	25.628	6.566	1.00	48.80	8
ATOM	13237	OWO	WAT	W	737	27.562	25.973	22.443	1.00	29.88	8
ATOM	13238	OWO	WAT	W	738	-0.028	-5.036	-12.243	1.00	44.30	8
ATOM	13239	OWO	WAT	W	739	10.996	26.918	-46.769	1.00	42.72	8
ATOM	13240	OWO	WAT	W	740	-21.603	-12.275	-13.023	1.00	30.74	8
ATOM	13241	OWO	WAT	W	741	-37.032	-1.009	-12.163	1.00	38.05	8
ATOM	13242	OWO	WAT	W	742	-30.695	20.113	-15.036	1.00	59.11	8
ATOM	13243	OWO	WAT	W	743	-0.265	-2.035	-12.440	1.00	41.11	8
ATOM	13244	OWO	WAT	W	744	13.112	35.669	9.358	1.00	32.99	8
ATOM	13245	OWO	WAT	W	745	16.088	-7.704	-24.780	1.00	57.53	8
ATOM	13246	OWO	WAT	W	746	-16.732	-29.028	-36.742	1.00	46.40	8
ATOM	13247	OWO	WAT	W	747	-15.628	5.861	-12.767	1.00	36.16	8
ATOM	13248	OWO	WAT	W	748	19.253	27.642	8.789	1.00	26.85	8
ATOM	13249	OWO	WAT	W	749	12.529	17.523	-43.067	1.00	62.45	8
ATOM	13250	OWO	WAT	W	750	-10.497	-8.653	30.050	1.00	32.94	8
ATOM	13251	OWO	WAT	W	751	-34.845	22.768	-5.929	1.00	50.01	8
ATOM	13252	OWO	WAT	W	752	-2.512	-7.567	-33.379	1.00	47.31	8
ATOM	13253	OWO	WAT	W	753	-17.219	18.142	23.931	1.00	49.87	8
ATOM	13254	OWO	WAT	W	754	-6.081	5.959	-54.419	1.00	52.03	8
ATOM	13255	OWO	WAT	W	755	11.900	16.664	21.798	1.00	47.72	8
ATOM	13256	OWO	WAT	W	756	-1.967	40.353	0.297	1.00	49.21	8
ATOM	13257	OWO	WAT	W	757	-6.592	13.392	-18.351	1.00	37.54	8
ATOM	13258	OWO	WAT	W	758	-11.305	13.914	-11.554	1.00	40.01	8
ATOM	13259	OWO	WAT	W	759	7.926	40.712	-17.462	1.00	58.93	8
ATOM	13260	OWO	WAT	W	760	31.537	13.582	2.031	1.00	47.36	8
ATOM	13261	OWO	WAT	W	761	8.037	11.169	18.965	1.00	45.90	8
ATOM	13262	OWO	WAT	W	762	-34.240	-6.063	-23.391	1.00	53.34	8

169/188

ATOM	13263	OWO	WAT	W	763	11.503	36.243	7.588	1.00	30.88	8
ATOM	13264	OWO	WAT	W	764	1.802	10.045	30.384	1.00	46.58	8
ATOM	13265	OWO	WAT	W	765	-19.539	19.664	22.992	1.00	36.73	8
ATOM	13266	OWO	WAT	W	766	-8.745	-15.254	4.860	1.00	35.75	8
ATOM	13267	OWO	WAT	W	767	0.323	-11.237	-28.770	1.00	31.04	8
ATOM	13268	OWO	WAT	W	768	7.300	-1.449	-35.788	1.00	39.30	8
ATOM	13269	OWO	WAT	W	769	-5.043	37.325	1.111	1.00	37.21	8
ATOM	13270	OWO	WAT	W	770	-18.641	40.558	10.439	1.00	33.95	8
ATOM	13271	OWO	WAT	W	771	31.453	18.702	24.286	1.00	39.94	8
ATOM	13272	OWO	WAT	W	772	33.923	20.685	16.947	1.00	38.80	8
ATOM	13273	OWO	WAT	W	773	-8.490	40.285	21.040	1.00	48.99	8
ATOM	13274	OWO	WAT	W	774	-10.526	1.954	38.367	1.00	42.79	8
ATOM	13275	OWO	WAT	W	775	-21.335	28.108	29.019	1.00	39.59	8
ATOM	13276	OWO	WAT	W	776	-30.389	22.909	9.782	1.00	41.11	8
ATOM	13277	OWO	WAT	W	777	-23.545	-12.491	0.928	1.00	44.16	8
ATOM	13278	OWO	WAT	W	778	-30.367	-0.339	1.372	1.00	40.76	8
ATOM	13279	OWO	WAT	W	779	16.134	-17.260	-10.443	1.00	33.42	8
ATOM	13280	OWO	WAT	W	780	6.926	4.121	-42.594	1.00	31.64	8
ATOM	13281	OWO	WAT	W	781	-8.557	-20.006	-0.531	1.00	59.71	8
ATOM	13282	OWO	WAT	W	782	-27.916	-9.626	-21.556	1.00	51.55	8
ATOM	13283	OWO	WAT	W	783	-18.618	11.478	20.951	1.00	41.83	8
ATOM	13284	OWO	WAT	W	784	-9.603	-10.007	-43.339	1.00	52.95	8
ATOM	13285	OWO	WAT	W	785	7.590	27.445	-43.161	1.00	40.34	8
ATOM	13286	OWO	WAT	W	786	-11.749	8.018	-42.211	1.00	43.61	8
ATOM	13287	OWO	WAT	W	787	-22.587	5.029	31.054	1.00	42.46	8
ATOM	13288	OWO	WAT	W	788	-38.549	-3.256	-30.666	1.00	39.79	8
ATOM	13289	OWO	WAT	W	789	-19.625	26.792	-27.020	1.00	32.72	8
ATOM	13290	OWO	WAT	W	790	32.181	-8.220	-11.194	1.00	65.54	8
ATOM	13291	OWO	WAT	W	791	-0.994	25.684	-16.369	1.00	38.08	8
ATOM	13292	OWO	WAT	W	792	7.108	25.438	16.583	1.00	37.30	8
ATOM	13293	OWO	WAT	W	793	18.725	36.532	-30.681	1.00	46.46	8
ATOM	13294	OWO	WAT	W	794	-18.651	37.333	-8.574	1.00	33.96	8
ATOM	13295	OWO	WAT	W	795	3.123	-21.182	-9.527	1.00	38.96	8
ATOM	13296	OWO	WAT	W	796	-5.639	7.351	-18.630	1.00	54.52	8
ATOM	13297	OWO	WAT	W	797	-7.720	2.605	-13.254	1.00	29.84	8
ATOM	13298	OWO	WAT	W	798	12.117	20.758	-45.448	1.00	45.73	8
ATOM	13299	OWO	WAT	W	799	-8.659	35.643	7.504	1.00	34.44	8
ATOM	13300	OWO	WAT	W	800	0.902	13.090	-18.774	1.00	36.50	8
ATOM	13301	OWO	WAT	W	801	14.394	-15.372	4.779	1.00	57.92	8
ATOM	13302	OWO	WAT	W	802	-25.185	24.503	-32.113	1.00	47.95	8
ATOM	13303	OWO	WAT	W	803	-28.955	24.131	-35.773	1.00	36.22	8
ATOM	13304	OWO	WAT	W	804	-39.045	17.419	-6.734	1.00	59.56	8
ATOM	13305	OWO	WAT	W	805	2.240	20.230	-29.462	1.00	28.83	8
ATOM	13306	OWO	WAT	W	806	1.636	39.249	-43.783	1.00	57.00	8
ATOM	13307	OWO	WAT	W	807	25.440	23.561	-10.534	1.00	41.95	8
ATOM	13308	OWO	WAT	W	808	8.162	27.145	-40.468	1.00	57.76	8
ATOM	13309	OWO	WAT	W	809	-7.317	-20.787	-15.939	1.00	35.21	8
ATOM	13310	OWO	WAT	W	810	15.711	36.143	-4.379	1.00	46.02	8
ATOM	13311	OWO	WAT	W	811	13.380	37.735	18.145	1.00	39.62	8
ATOM	13312	OWO	WAT	W	812	-12.058	42.982	-16.441	1.00	41.83	8
ATOM	13313	OWO	WAT	W	813	16.781	-13.707	-0.713	1.00	28.76	8
ATOM	13314	OWO	WAT	W	814	9.914	23.717	18.349	1.00	38.55	8
ATOM	13315	OWO	WAT	W	815	11.859	22.291	23.667	1.00	43.59	8
ATOM	13316	OWO	WAT	W	816	-8.866	14.017	-17.103	1.00	42.75	8
ATOM	13317	OWO	WAT	W	817	-21.887	-16.424	2.368	1.00	49.26	8
ATOM	13318	OWO	WAT	W	818	36.660	20.216	14.065	1.00	34.59	8
ATOM	13319	OWO	WAT	W	819	-7.949	32.532	10.531	1.00	37.80	8
ATOM	13320	OWO	WAT	W	820	-19.614	21.915	21.737	1.00	41.06	8
ATOM	13321	OWO	WAT	W	821	-16.408	28.900	-42.680	1.00	36.15	8
ATOM	13322	OWO	WAT	W	822	34.130	-14.166	3.854	1.00	47.53	8
ATOM	13323	OWO	WAT	W	823	21.339	16.133	-40.978	1.00	45.73	8
ATOM	13324	OWO	WAT	W	824	-18.940	12.331	28.397	1.00	35.86	8
ATOM	13325	OWO	WAT	W	825	-30.499	28.149	-6.740	1.00	54.35	8
ATOM	13326	OWO	WAT	W	826	9.174	-13.730	23.355	1.00	52.79	8
ATOM	13327	OWO	WAT	W	827	19.514	39.565	13.872	1.00	47.78	8
ATOM	13328	OWO	WAT	W	828	-12.262	1.958	-43.101	1.00	49.86	8
ATOM	13329	OWO	WAT	W	829	-28.913	20.978	-17.367	1.00	38.13	8
ATOM	13330	OWO	WAT	W	830	5.970	40.124	-6.081	1.00	42.42	8
ATOM	13331	OWO	WAT	W	831	1.763	22.202	22.019	1.00	36.39	8
ATOM	13332	OWO	WAT	W	832	2.496	-19.170	-26.996	1.00	40.12	8
ATOM	13333	OWO	WAT	W	833	17.461	-22.602	-4.252	1.00	42.03	8
ATOM	13334	OWO	WAT	W	834	-27.475	22.606	-39.729	1.00	49.87	8
ATOM	13335	OWO	WAT	W	835	4.824	27.612	16.137	1.00	39.88	8
ATOM	13336	OWO	WAT	W	836	33.734	8.915	-5.177	1.00	41.00	8
ATOM	13337	OWO	WAT	W	837	6.328	-13.316	11.613	1.00	35.13	8
ATOM	13338	OWO	WAT	W	838	-40.513	-2.366	-32.038	1.00	43.66	8
ATOM	13339	OWO	WAT	W	839	10.131	-19.579	-3.534	1.00	35.17	8
ATOM	13340	OWO	WAT	W	840	-32.038	1.742	9.954	1.00	36.11	8
ATOM	13341	OWO	WAT	W	841	25.595	13.662	2.994	1.00	46.01	8

170/188

ATOM	13342	OWO	WAT	W	842	0.804	-20.326	-7.891	1.00	32.90	8
ATOM	13343	OWO	WAT	W	843	-0.428	39.021	-11.546	1.00	52.78	8
ATOM	13344	OWO	WAT	W	844	-30.192	-7.851	-42.960	1.00	41.18	8
ATOM	13345	OWO	WAT	W	845	-20.646	-18.139	-0.215	1.00	44.53	8
ATOM	13346	OWO	WAT	W	846	-10.973	43.837	12.806	1.00	42.61	8
ATOM	13347	OWO	WAT	W	847	8.655	0.837	-36.275	1.00	42.94	8
ATOM	13348	OWO	WAT	W	848	-34.947	-2.209	-45.640	1.00	71.64	8
ATOM	13349	OWO	WAT	W	849	30.781	8.702	20.294	1.00	49.15	8
ATOM	13350	OWO	WAT	W	850	12.948	42.927	-12.922	1.00	47.00	8
ATOM	13351	OWO	WAT	W	851	9.326	3.947	-41.289	1.00	34.96	8
ATOM	13352	OWO	WAT	W	852	25.023	12.120	-23.486	1.00	61.98	8
ATOM	13353	OWO	WAT	W	853	-16.100	5.710	20.199	1.00	31.48	8
ATOM	13354	OWO	WAT	W	854	-18.845	8.441	29.982	1.00	36.97	8
ATOM	13355	OWO	WAT	W	855	-35.128	19.412	-45.696	1.00	60.60	8
ATOM	13356	OWO	WAT	W	856	-17.870	8.275	-46.515	1.00	37.36	8
ATOM	13357	OWO	WAT	W	857	-2.050	17.186	-4.130	1.00	41.09	8
ATOM	13358	OWO	WAT	W	858	3.338	-15.308	12.037	1.00	32.74	8
ATOM	13359	OWO	WAT	W	859	-3.588	-13.835	6.677	1.00	38.14	8
ATOM	13360	OWO	WAT	W	860	-25.392	-5.462	19.337	1.00	62.59	8
ATOM	13361	OWO	WAT	W	861	-8.544	24.062	29.313	1.00	48.92	8
ATOM	13362	OWO	WAT	W	862	8.908	-18.075	-23.749	1.00	49.22	8
ATOM	13363	OWO	WAT	W	863	-21.682	5.920	28.749	1.00	61.88	8
ATOM	13364	OWO	WAT	W	864	8.749	25.205	22.466	1.00	41.95	8
ATOM	13365	OWO	WAT	W	865	-2.899	24.560	27.992	1.00	47.78	8
ATOM	13366	OWO	WAT	W	866	-10.986	-5.583	-12.686	1.00	45.25	8
ATOM	13367	OWO	WAT	W	867	-22.327	-15.059	6.910	1.00	40.17	8
ATOM	13368	OWO	WAT	W	868	-19.109	-23.040	-0.334	1.00	64.83	8
ATOM	13369	OWO	WAT	W	869	-20.027	35.648	-0.632	1.00	53.67	8
ATOM	13370	OWO	WAT	W	870	-25.399	7.162	-46.858	1.00	54.45	8
ATOM	13371	OWO	WAT	W	871	-17.452	34.288	-26.240	1.00	36.79	8
ATOM	13372	OWO	WAT	W	872	-23.114	28.944	-33.283	1.00	40.46	8
ATOM	13373	OWO	WAT	W	873	4.519	-14.118	8.945	1.00	47.03	8
ATOM	13374	OWO	WAT	W	874	-21.227	39.252	16.494	1.00	58.40	8
ATOM	13375	OWO	WAT	W	875	17.267	21.004	-33.988	1.00	40.29	8
ATOM	13376	OWO	WAT	W	876	34.421	21.912	-8.527	1.00	35.59	8
ATOM	13377	OWO	WAT	W	877	-10.888	16.787	-12.406	1.00	45.14	8
ATOM	13378	OWO	WAT	W	878	40.081	2.656	-17.816	1.00	51.25	8
ATOM	13379	OWO	WAT	W	879	-25.497	23.210	19.008	1.00	32.28	8
ATOM	13380	OWO	WAT	W	880	-12.171	21.767	-4.112	1.00	45.35	8
ATOM	13381	OWO	WAT	W	881	-2.509	-17.523	4.225	1.00	37.28	8
ATOM	13382	OWO	WAT	W	882	-9.881	34.787	11.395	1.00	34.47	8
ATOM	13383	OWO	WAT	W	883	1.243	11.188	-11.225	1.00	39.75	8
ATOM	13384	OWO	WAT	W	884	-32.722	22.948	2.074	1.00	36.80	8
ATOM	13385	OWO	WAT	W	885	-5.569	-13.839	-31.194	1.00	45.39	8
ATOM	13386	OWO	WAT	W	886	35.129	-8.047	4.368	1.00	33.38	8
ATOM	13387	OWO	WAT	W	887	-19.786	23.919	-39.236	1.00	34.38	8
ATOM	13388	OWO	WAT	W	888	-35.707	-12.268	-39.676	1.00	44.33	8
ATOM	13389	OWO	WAT	W	889	24.022	0.080	-27.406	1.00	28.09	8
ATOM	13390	OWO	WAT	W	890	-11.485	25.469	30.246	1.00	37.59	8
ATOM	13391	OWO	WAT	W	891	-20.051	40.141	-29.964	1.00	47.94	8
ATOM	13392	OWO	WAT	W	892	28.323	-18.759	2.250	1.00	53.70	8
ATOM	13393	OWO	WAT	W	893	-13.725	41.594	-14.611	1.00	40.60	8
ATOM	13394	OWO	WAT	W	894	3.047	35.166	13.690	1.00	65.84	8
ATOM	13395	OWO	WAT	W	895	-38.717	-9.761	-14.567	1.00	41.57	8
ATOM	13396	OWO	WAT	W	896	-6.541	-24.699	-12.596	1.00	40.11	8
ATOM	13397	OWO	WAT	W	897	4.212	-15.360	-13.713	1.00	30.21	8
ATOM	13398	OWO	WAT	W	898	20.988	35.381	-0.026	1.00	50.12	8
ATOM	13399	OWO	WAT	W	899	-28.845	24.913	6.387	1.00	46.86	8
ATOM	13400	OWO	WAT	W	900	-2.841	7.482	-21.267	1.00	39.01	8
ATOM	13401	OWO	WAT	W	901	-26.765	25.868	-34.035	1.00	43.78	8
ATOM	13402	OWO	WAT	W	902	-2.847	-5.410	-40.898	1.00	45.59	8
ATOM	13403	OWO	WAT	W	903	10.458	16.551	19.820	1.00	44.54	8
ATOM	13404	OWO	WAT	W	904	25.425	10.107	-19.098	1.00	50.29	8
ATOM	13405	OWO	WAT	W	905	11.316	6.018	1.691	1.00	33.09	8
ATOM	13406	OWO	WAT	W	906	-31.188	21.620	6.776	1.00	30.10	8
ATOM	13407	OWO	WAT	W	907	-0.037	-18.132	-3.029	1.00	31.98	8
ATOM	13408	OWO	WAT	W	908	37.432	4.842	-20.466	1.00	69.99	8
ATOM	13409	OWO	WAT	W	909	-6.764	15.581	-22.541	1.00	30.73	8
ATOM	13410	OWO	WAT	W	910	5.831	27.068	20.479	1.00	57.51	8
ATOM	13411	OWO	WAT	W	911	35.843	6.542	0.904	1.00	51.52	8
ATOM	13412	OWO	WAT	W	912	1.213	8.006	-4.036	1.00	33.32	8
ATOM	13413	OWO	WAT	W	913	21.329	18.993	-23.742	1.00	35.59	8
ATOM	13414	OWO	WAT	W	914	-21.674	3.097	33.761	1.00	57.14	8
ATOM	13415	OWO	WAT	W	915	-22.890	35.223	13.090	1.00	46.61	8
ATOM	13416	OWO	WAT	W	916	-37.198	5.799	-15.614	1.00	38.97	8
ATOM	13417	OWO	WAT	W	917	22.689	-5.548	-18.769	1.00	43.24	8
ATOM	13418	OWO	WAT	W	918	-13.405	31.870	25.897	1.00	42.67	8
ATOM	13419	OWO	WAT	W	919	-44.180	9.318	-44.209	1.00	68.56	8
ATOM	13420	OWO	WAT	W	920	20.168	-8.966	-16.401	1.00	23.26	8

171/188

ATOM	13421	OWO	WAT	W	921	-31.470	24.082	5.359	1.00	45.98	8
ATOM	13422	OWO	WAT	W	922	13.052	39.823	-12.456	1.00	33.80	8
ATOM	13423	OWO	WAT	W	923	-10.668	19.750	-4.641	1.00	34.51	8
ATOM	13424	OWO	WAT	W	924	-17.788	3.247	28.714	1.00	46.83	8
ATOM	13425	OWO	WAT	W	925	7.672	-21.744	-6.974	1.00	40.67	8
ATOM	13426	OWO	WAT	W	926	-11.411	19.840	-8.400	1.00	45.53	8
ATOM	13427	OWO	WAT	W	927	20.652	25.562	-38.550	1.00	44.79	8
ATOM	13428	OWO	WAT	W	928	-4.263	-23.664	-30.157	1.00	44.00	8
ATOM	13429	OWO	WAT	W	929	-0.564	-11.835	-17.498	1.00	27.33	8
ATOM	13430	OWO	WAT	W	930	5.800	19.402	21.044	1.00	34.43	8
ATOM	13431	OWO	WAT	W	931	-11.144	4.778	-20.750	1.00	34.72	8
ATOM	13432	OWO	WAT	W	932	28.342	15.328	0.568	1.00	38.98	8
ATOM	13433	OWO	WAT	W	933	30.993	-2.667	-26.456	1.00	53.73	8
ATOM	13434	OWO	WAT	W	934	-33.592	-14.920	-24.632	1.00	56.22	8
ATOM	13435	OWO	WAT	W	935	-3.268	-12.689	9.340	1.00	40.92	8
ATOM	13436	OWO	WAT	W	936	31.202	8.002	-4.282	1.00	37.61	8
ATOM	13437	OWO	WAT	W	937	37.790	9.383	-15.182	1.00	76.57	8
ATOM	13438	OWO	WAT	W	938	-15.794	-0.123	-36.082	1.00	37.58	8
ATOM	13439	OWO	WAT	W	939	-16.767	20.391	-46.848	1.00	44.15	8
ATOM	13440	OWO	WAT	W	940	-4.428	-4.867	-13.890	1.00	56.64	8
ATOM	13441	OWO	WAT	W	941	-36.219	14.244	-40.947	1.00	64.12	8
ATOM	13442	OWO	WAT	W	942	4.045	23.164	-58.779	1.00	51.75	8
ATOM	13443	OWO	WAT	W	943	-23.588	-20.452	0.483	1.00	41.51	8
ATOM	13444	OWO	WAT	W	944	-5.556	13.959	-16.216	1.00	42.02	8
ATOM	13445	OWO	WAT	W	945	-7.747	-19.753	-3.892	1.00	57.30	8
ATOM	13446	OWO	WAT	W	946	-22.456	32.157	-11.936	1.00	34.04	8
ATOM	13447	OWO	WAT	W	947	-20.833	37.660	-14.664	1.00	34.77	8
ATOM	13448	OWO	WAT	W	948	-14.086	4.596	-50.046	1.00	49.89	8
ATOM	13449	OWO	WAT	W	949	-6.179	-22.847	-14.777	1.00	57.63	8
ATOM	13450	OWO	WAT	W	950	-8.794	10.716	-9.068	1.00	45.41	8
ATOM	13451	OWO	WAT	W	951	35.153	-9.679	6.460	1.00	65.89	8
ATOM	13452	OWO	WAT	W	952	22.524	24.916	7.927	1.00	43.18	8
ATOM	13453	OWO	WAT	W	953	-8.532	21.433	30.015	1.00	40.83	8
ATOM	13454	OWO	WAT	W	954	-19.334	47.770	-30.655	1.00	59.98	8
ATOM	13455	OWO	WAT	W	955	7.411	-3.540	-38.821	1.00	41.91	8
ATOM	13456	OWO	WAT	W	956	-35.983	13.137	15.069	1.00	36.80	8
ATOM	13457	OWO	WAT	W	957	-18.585	3.848	-48.375	1.00	73.19	8
ATOM	13458	OWO	WAT	W	958	33.239	17.911	9.255	1.00	61.32	8
ATOM	13459	OWO	WAT	W	959	20.778	-9.781	-13.189	1.00	50.46	8
ATOM	13460	OWO	WAT	W	960	-0.732	-21.587	-20.547	1.00	36.43	8
ATOM	13461	OWO	WAT	W	961	36.603	17.669	17.785	1.00	42.40	8
ATOM	13462	OWO	WAT	W	962	4.224	0.534	-11.430	1.00	42.30	8
ATOM	13463	OWO	WAT	W	963	-35.231	11.426	-2.280	1.00	39.76	8
ATOM	13464	OWO	WAT	W	964	9.590	18.653	-45.600	1.00	39.83	8
ATOM	13465	OWO	WAT	W	965	-16.087	-3.711	33.551	1.00	53.86	8
ATOM	13466	OWO	WAT	W	966	-36.735	18.294	-11.412	1.00	49.33	8
ATOM	13467	OWO	WAT	W	967	8.051	42.686	-15.161	1.00	51.18	8
ATOM	13468	OWO	WAT	W	968	-1.753	-20.788	-15.598	1.00	41.42	8
ATOM	13469	OWO	WAT	W	969	-6.556	1.357	-56.418	1.00	46.58	8
ATOM	13470	OWO	WAT	W	970	22.771	5.834	-31.218	1.00	36.74	8
ATOM	13471	OWO	WAT	W	971	-6.977	31.999	12.931	1.00	40.03	8
ATOM	13472	OWO	WAT	W	972	-31.054	-1.610	-1.437	1.00	39.07	8
ATOM	13473	OWO	WAT	W	973	11.524	3.973	-33.521	1.00	45.23	8
ATOM	13474	OWO	WAT	W	974	-36.824	-12.366	-36.509	1.00	53.26	8
ATOM	13475	OWO	WAT	W	975	6.357	4.877	19.722	1.00	50.39	8
ATOM	13476	OWO	WAT	W	976	7.589	8.215	18.848	1.00	42.17	8
ATOM	13477	OWO	WAT	W	977	-0.765	22.596	-61.347	1.00	61.87	8
ATOM	13478	OWO	WAT	W	978	10.660	-3.698	-34.692	1.00	50.78	8
ATOM	13479	OWO	WAT	W	979	-12.538	12.705	-17.341	1.00	33.91	8
ATOM	13480	OWO	WAT	W	980	-11.019	24.307	-7.804	1.00	42.65	8
ATOM	13481	OWO	WAT	W	981	-6.332	48.535	-34.090	1.00	39.81	8
ATOM	13482	OWO	WAT	W	982	15.482	-9.947	12.021	1.00	41.56	8
ATOM	13483	OWO	WAT	W	983	-3.643	31.524	-55.474	1.00	53.48	8
ATOM	13484	OWO	WAT	W	984	-1.827	-13.413	26.229	1.00	55.62	8
ATOM	13485	OWO	WAT	W	985	-39.828	19.137	-34.891	1.00	46.09	8
ATOM	13486	OWO	WAT	W	986	11.502	-15.465	-1.385	1.00	31.03	8
ATOM	13487	OWO	WAT	W	987	35.373	6.548	-1.679	1.00	60.05	8
ATOM	13488	OWO	WAT	W	988	17.737	32.714	-20.468	1.00	62.57	8
ATOM	13489	OWO	WAT	W	989	22.431	-3.364	-25.076	1.00	55.70	8
ATOM	13490	OWO	WAT	W	990	3.271	40.005	-8.192	1.00	48.44	8
ATOM	13491	OWO	WAT	W	991	-6.480	48.335	-24.567	1.00	42.64	8
ATOM	13492	OWO	WAT	W	992	17.797	7.020	-41.839	1.00	53.16	8
ATOM	13493	OWO	WAT	W	993	26.933	-5.172	-19.867	1.00	57.11	8
ATOM	13494	OWO	WAT	W	994	-24.762	-14.132	3.479	1.00	61.63	8
ATOM	13495	OWO	WAT	W	995	6.400	11.676	22.681	1.00	55.06	8
ATOM	13496	OWO	WAT	W	996	-20.867	31.295	-34.616	1.00	45.02	8
ATOM	13497	OWO	WAT	W	997	-45.950	6.888	-35.891	1.00	46.85	8
ATOM	13498	OWO	WAT	W	998	-19.527	4.266	20.576	1.00	47.41	8
ATOM	13499	OWO	WAT	W	999	-17.020	1.591	30.473	1.00	44.11	8

172/188

ATOM	13500	OWO	WAT	W1000	-17.056	-25.273	-18.649	1.00	51.02	8
ATOM	13501	OWO	WAT	W1001	33.915	-11.690	8.032	1.00	62.41	8
ATOM	13502	OWO	WAT	W1002	-2.733	20.341	-61.965	1.00	48.07	8
ATOM	13503	OWO	WAT	W1003	6.188	6.873	21.047	1.00	42.04	8
ATOM	13504	OWO	WAT	W1004	24.980	2.132	-26.674	1.00	32.56	8
ATOM	13505	OWO	WAT	W1005	8.933	37.659	14.410	1.00	38.67	8
ATOM	13506	OWO	WAT	W1006	8.082	31.457	1.192	1.00	40.44	8
ATOM	13507	OWO	WAT	W1007	23.284	2.850	-32.094	1.00	57.17	8
ATOM	13508	OWO	WAT	W1008	-26.221	15.948	18.054	1.00	50.54	8
ATOM	13509	OWO	WAT	W1009	-24.590	31.633	-20.116	1.00	38.33	8
ATOM	13510	OWO	WAT	W1010	-27.109	-19.965	-21.547	1.00	46.70	8
ATOM	13511	OWO	WAT	W1011	-12.607	34.526	24.835	1.00	43.57	8
ATOM	13512	OWO	WAT	W1012	12.080	-12.507	1.678	1.00	38.79	8
ATOM	13513	OWO	WAT	W1013	-28.153	19.008	-41.651	1.00	61.98	8
ATOM	13514	OWO	WAT	W1014	-36.335	1.504	-5.336	1.00	44.10	8
ATOM	13515	OWO	WAT	W1015	-35.810	16.579	-23.078	1.00	35.06	8
ATOM	13516	OWO	WAT	W1016	21.836	33.568	-7.780	1.00	36.06	8
ATOM	13517	OWO	WAT	W1017	21.220	31.174	21.286	1.00	40.26	8
ATOM	13518	OWO	WAT	W1018	-34.666	29.062	-27.999	1.00	37.10	8
ATOM	13519	OWO	WAT	W1019	21.456	18.645	-34.019	1.00	47.67	8
ATOM	13520	OWO	WAT	W1020	14.777	38.391	-14.020	1.00	41.25	8
ATOM	13521	OWO	WAT	W1021	-25.509	31.664	22.621	1.00	69.32	8
ATOM	13522	OWO	WAT	W1022	-5.738	31.682	-38.695	1.00	41.81	8
ATOM	13523	OWO	WAT	W1023	7.832	36.338	-40.188	1.00	63.73	8
ATOM	13524	OWO	WAT	W1024	-24.299	28.930	23.739	1.00	47.44	8
ATOM	13525	OWO	WAT	W1025	-35.299	13.730	-26.812	1.00	32.70	8
ATOM	13526	OWO	WAT	W1026	20.737	25.222	5.752	1.00	36.81	8
ATOM	13527	OWO	WAT	W1027	13.553	3.034	-34.879	1.00	58.29	8
ATOM	13528	OWO	WAT	W1028	-13.744	49.226	-31.036	1.00	55.49	8
ATOM	13529	OWO	WAT	W1029	7.450	24.597	-40.407	1.00	54.06	8
ATOM	13530	OWO	WAT	W1030	23.875	18.098	-22.674	1.00	53.04	8
ATOM	13531	OWO	WAT	W1031	-22.294	12.712	16.202	1.00	39.05	8
ATOM	13532	OWO	WAT	W1032	2.080	1.750	-14.092	1.00	53.70	8
ATOM	13533	OWO	WAT	W1033	-25.973	29.456	-4.616	1.00	47.26	8
ATOM	13534	OWO	WAT	W1034	-5.459	41.608	16.942	1.00	37.31	8
ATOM	13535	OWO	WAT	W1035	14.839	-10.609	14.370	1.00	58.60	8
ATOM	13536	OWO	WAT	W1036	30.502	23.016	24.712	1.00	43.89	8
ATOM	13537	OWO	WAT	W1037	0.108	27.596	-47.975	1.00	49.59	8
ATOM	13538	OWO	WAT	W1038	-11.710	21.377	-50.629	1.00	40.94	8
ATOM	13539	OWO	WAT	W1039	-36.369	-17.407	-13.615	1.00	59.62	8
ATOM	13540	OWO	WAT	W1040	-30.364	27.633	-16.196	1.00	50.71	8
ATOM	13541	OWO	WAT	W1041	-28.909	-7.503	13.877	1.00	54.52	8
ATOM	13542	OWO	WAT	W1042	10.862	38.711	-11.200	1.00	38.91	8
ATOM	13543	OWO	WAT	W1043	-11.407	6.676	-45.199	1.00	71.30	8
ATOM	13544	OWO	WAT	W1044	-28.202	-18.723	-29.970	1.00	59.51	8
ATOM	13545	OWO	WAT	W1045	-44.733	24.820	4.069	1.00	56.96	8
ATOM	13546	OWO	WAT	W1046	-6.879	13.932	9.021	1.00	43.39	8
ATOM	13547	OWO	WAT	W1047	-3.317	36.752	5.863	1.00	61.09	8
ATOM	13548	OWO	WAT	W1048	17.025	30.784	6.083	1.00	31.50	8
ATOM	13549	OWO	WAT	W1049	3.606	33.856	9.595	1.00	46.20	8
ATOM	13550	OWO	WAT	W1050	0.008	28.586	20.792	1.00	52.34	8
ATOM	13551	OWO	WAT	W1051	19.914	32.614	18.660	1.00	55.65	8
ATOM	13552	OWO	WAT	W1052	-34.016	8.508	5.303	1.00	51.06	8
ATOM	13553	OWO	WAT	W1053	35.418	17.765	10.476	1.00	60.72	8
ATOM	13554	OWO	WAT	W1054	-31.058	1.836	2.689	1.00	52.28	8
ATOM	13555	OWO	WAT	W1055	23.144	30.512	7.523	1.00	40.38	8
ATOM	13556	OWO	WAT	W1056	29.866	-5.224	-27.235	1.00	66.85	8
ATOM	13557	OWO	WAT	W1057	-6.599	-18.111	4.788	1.00	76.61	8
ATOM	13558	OWO	WAT	W1058	-41.289	-9.210	-15.515	1.00	43.82	8
ATOM	13559	OWO	WAT	W1059	14.359	-2.962	16.520	1.00	40.27	8
ATOM	13560	OWO	WAT	W1060	9.642	-11.026	-26.077	1.00	45.58	8
ATOM	13561	OWO	WAT	W1061	22.821	20.760	-19.856	1.00	65.50	8
ATOM	13562	OWO	WAT	W1062	-10.584	-11.159	16.954	1.00	46.78	8
ATOM	13563	OWO	WAT	W1063	-43.286	-6.054	-30.664	1.00	76.76	8
ATOM	13564	OWO	WAT	W1064	21.344	9.035	-34.748	1.00	30.65	8
ATOM	13565	OWO	WAT	W1065	6.032	10.060	-41.003	1.00	59.32	8
ATOM	13566	OWO	WAT	W1066	8.032	8.122	-42.098	1.00	49.12	8
ATOM	13567	OWO	WAT	W1067	16.972	26.177	9.218	1.00	36.19	8
ATOM	13568	OWO	WAT	W1068	-12.155	29.251	-49.616	1.00	50.88	8
ATOM	13569	OWO	WAT	W1069	6.058	-19.354	-23.963	1.00	55.52	8
ATOM	13570	OWO	WAT	W1070	-35.084	14.080	-3.490	1.00	26.84	8
ATOM	13571	OWO	WAT	W1071	-1.934	40.465	-8.533	1.00	61.73	8
ATOM	13572	OWO	WAT	W1072	-41.174	25.201	3.417	1.00	60.10	8
ATOM	13573	OWO	WAT	W1073	-22.963	10.568	-53.804	1.00	50.97	8
ATOM	13574	OWO	WAT	W1074	-33.957	6.359	3.683	1.00	45.94	8
ATOM	13575	OWO	WAT	W1075	21.712	23.217	-18.456	1.00	34.93	8
ATOM	13576	OWO	WAT	W1076	9.453	-3.209	-40.514	1.00	41.62	8
ATOM	13577	OWO	WAT	W1077	-10.852	-10.541	8.040	1.00	43.08	8
ATOM	13578	OWO	WAT	W1078	-5.721	39.740	-7.282	1.00	37.48	8

173/188

ATOM	13579	OWO	WAT	W1079	3.592	40.301	-17.164	1.00	67.37	8
ATOM	13580	OWO	WAT	W1080	-12.227	41.975	21.770	1.00	43.61	8
ATOM	13581	OWO	WAT	W1081	34.509	1.502	-24.190	1.00	43.18	8
ATOM	13582	OWO	WAT	W1082	-31.539	24.176	-17.111	1.00	54.29	8
ATOM	13583	OWO	WAT	W1083	-23.013	23.551	-37.868	1.00	43.72	8
ATOM	13584	OWO	WAT	W1084	-8.207	-2.144	-47.914	1.00	44.79	8
ATOM	13585	OWO	WAT	W1085	6.414	-18.982	-15.128	1.00	50.35	8
ATOM	13586	OWO	WAT	W1086	-19.859	12.189	-46.103	1.00	50.92	8
ATOM	13587	OWO	WAT	W1087	7.080	3.220	23.880	1.00	75.69	8
ATOM	13588	OWO	WAT	W1088	24.155	18.435	-19.368	1.00	61.77	8
ATOM	13589	OWO	WAT	W1089	20.606	-20.938	7.676	1.00	55.16	8
ATOM	13590	OWO	WAT	W1090	-17.783	1.905	33.233	1.00	52.81	8
ATOM	13591	OWO	WAT	W1091	10.226	34.229	-37.438	1.00	40.41	8
ATOM	13592	OWO	WAT	W1092	21.266	-18.859	-4.291	1.00	38.04	8
ATOM	13593	OWO	WAT	W1093	1.517	28.326	-31.275	1.00	39.70	8
ATOM	13594	OWO	WAT	W1094	14.266	-12.429	3.413	1.00	41.90	8
ATOM	13595	OWO	WAT	W1095	-4.672	-5.769	38.450	1.00	46.23	8
ATOM	13596	OWO	WAT	W1096	-23.185	34.567	-7.912	1.00	48.71	8
ATOM	13597	OWO	WAT	W1097	-12.253	11.027	-14.563	1.00	44.40	8
ATOM	13598	OWO	WAT	W1098	-10.567	39.613	-3.650	1.00	36.02	8
ATOM	13599	OWO	WAT	W1099	-11.810	36.977	-44.743	1.00	45.19	8
ATOM	13600	OWO	WAT	W1100	-20.711	10.845	-40.021	1.00	35.56	8
ATOM	13601	OWO	WAT	W1101	-28.828	25.696	2.970	1.00	54.00	8
ATOM	13602	OWO	WAT	W1102	31.018	6.314	-23.758	1.00	42.35	8
ATOM	13603	OWO	WAT	W1103	-12.507	-1.161	-41.028	1.00	49.15	8
ATOM	13604	OWO	WAT	W1104	5.913	24.858	18.694	1.00	37.00	8
ATOM	13605	OWO	WAT	W1105	-20.447	4.529	-11.277	1.00	34.28	8
ATOM	13606	OWO	WAT	W1106	-29.045	27.508	-4.726	1.00	51.70	8
ATOM	13607	OWO	WAT	W1107	-41.375	17.952	-37.414	1.00	48.75	8
ATOM	13608	OWO	WAT	W1108	-7.367	-13.770	-8.694	1.00	41.96	8
ATOM	13609	OWO	WAT	W1109	-6.143	3.807	-10.588	1.00	75.54	8
ATOM	13610	OWO	WAT	W1110	35.013	-8.541	-5.682	1.00	60.67	8
ATOM	13611	OWO	WAT	W1111	11.459	3.858	-36.340	1.00	65.81	8
ATOM	13612	OWO	WAT	W1112	-19.724	-9.542	-22.278	1.00	24.09	8
ATOM	13613	OWO	WAT	W1113	-4.079	-22.088	19.977	1.00	49.00	8
ATOM	13614	OWO	WAT	W1114	5.493	28.847	18.554	1.00	34.43	8
ATOM	13615	OWO	WAT	W1115	-16.897	-33.853	-30.980	1.00	88.41	8
ATOM	13616	OWO	WAT	W1116	-13.364	-4.625	35.002	1.00	37.01	8
ATOM	13617	OWO	WAT	W1117	-18.207	-9.808	-44.379	1.00	69.30	8
ATOM	13618	OWO	WAT	W1118	-0.968	13.934	-11.236	1.00	49.61	8
ATOM	13619	OWO	WAT	W1119	30.028	27.670	-10.554	1.00	52.99	8
ATOM	13620	OWO	WAT	W1120	-18.645	37.430	4.558	1.00	29.16	8
ATOM	13621	OWO	WAT	W1121	-5.015	-11.800	6.204	1.00	37.73	8
ATOM	13622	OWO	WAT	W1122	5.269	-23.133	-7.563	1.00	61.83	8
ATOM	13623	OWO	WAT	W1123	-21.437	25.635	-37.454	1.00	57.87	8
ATOM	13624	OWO	WAT	W1124	-16.023	-0.742	36.219	1.00	52.02	8
ATOM	13625	OWO	WAT	W1125	26.512	22.039	25.879	1.00	28.15	8
ATOM	13626	OWO	WAT	W1126	-16.558	19.725	-3.554	1.00	45.71	8
ATOM	13627	OWO	WAT	W1127	-2.631	3.048	37.845	1.00	74.49	8
ATOM	13628	OWO	WAT	W1128	-8.179	-12.642	5.588	1.00	39.48	8
ATOM	13629	OWO	WAT	W1129	-9.135	11.042	-17.618	1.00	70.88	8
ATOM	13630	OWO	WAT	W1130	-22.645	24.571	29.739	1.00	53.11	8
ATOM	13631	OWO	WAT	W1131	14.742	-15.006	0.414	1.00	37.33	8
ATOM	13632	OWO	WAT	W1132	24.387	5.521	-28.987	1.00	47.37	8
ATOM	13633	OWO	WAT	W1133	22.872	17.466	-29.954	1.00	46.89	8
ATOM	13634	OWO	WAT	W1134	15.442	31.260	-21.907	1.00	49.13	8
ATOM	13635	OWO	WAT	W1135	-34.789	-16.246	-9.792	1.00	41.74	8
ATOM	13636	OWO	WAT	W1136	10.950	6.433	-42.457	1.00	57.79	8
ATOM	13637	OWO	WAT	W1137	-42.849	16.249	-44.247	1.00	50.42	8
ATOM	13638	OWO	WAT	W1138	-40.378	-6.471	-44.508	1.00	52.50	8
ATOM	13639	OWO	WAT	W1139	-5.761	20.574	-61.345	1.00	75.16	8
ATOM	13640	OWO	WAT	W1140	-33.800	8.388	0.369	1.00	44.54	8
ATOM	13641	OWO	WAT	W1141	-29.445	23.242	-18.039	1.00	34.75	8
ATOM	13642	OWO	WAT	W1142	10.887	-14.274	-22.097	1.00	33.13	8
ATOM	13643	OWO	WAT	W1143	35.824	24.205	21.554	1.00	59.90	8
ATOM	13644	OWO	WAT	W1144	32.676	14.575	5.324	1.00	49.78	8
ATOM	13645	OWO	WAT	W1145	-15.729	12.958	14.256	1.00	33.94	8
ATOM	13646	OWO	WAT	W1146	20.418	1.840	-31.936	1.00	44.23	8
ATOM	13647	OWO	WAT	W1147	-1.861	46.110	-31.394	1.00	46.54	8
ATOM	13648	OWO	WAT	W1148	-5.804	22.822	-9.940	1.00	55.05	8
ATOM	13649	OWO	WAT	W1149	-20.307	41.143	-16.853	1.00	46.93	8
ATOM	13650	OWO	WAT	W1150	-20.624	38.794	-17.663	1.00	42.33	8
ATOM	13652	OWO	WAT	W1151	-6.321	-19.251	-8.034	1.00	43.81	8
ATOM	13653	OWO	WAT	W1152	-4.726	-3.935	-40.477	1.00	47.47	8
ATOM	13654	OWO	WAT	W1153	-0.147	46.613	-33.170	1.00	48.31	8
ATOM	13655	OWO	WAT	W1154	-10.525	8.729	-14.684	1.00	43.09	8
ATOM	13656	OWO	WAT	W1155	-46.174	0.798	-38.160	1.00	43.50	8
ATOM	13657	OWO	WAT	W1156	-16.214	34.972	22.061	1.00	34.19	8
ATOM	13658	OWO	WAT	W1157	-18.103	-20.074	-0.292	1.00	41.27	8

174/188

ATOM	13659	OWO	WAT	W1158	24.834	-21.003	4.082	1.00	38.50	8
ATOM	13660	OWO	WAT	W1159	-28.519	33.064	-13.285	1.00	56.87	8
ATOM	13661	OWO	WAT	W1160	6.225	-15.465	-26.629	1.00	42.48	8
ATOM	13662	OWO	WAT	W1161	3.521	-15.137	6.682	1.00	42.24	8
ATOM	13663	OWO	WAT	W1162	-26.689	26.031	-46.006	1.00	45.41	8
ATOM	13664	OWO	WAT	W1163	-5.584	-1.006	-41.857	1.00	36.39	8
ATOM	13665	OWO	WAT	W1164	-5.565	40.974	-16.268	1.00	37.86	8
ATOM	13666	OWO	WAT	W1165	20.420	-1.359	-28.865	1.00	60.59	8
ATOM	13667	OWO	WAT	W1166	24.312	5.257	22.493	1.00	62.92	8
ATOM	13668	OWO	WAT	W1167	13.254	10.319	-42.356	1.00	55.94	8
ATOM	13669	OWO	WAT	W1168	-6.885	24.223	27.098	1.00	36.72	8
ATOM	13670	OWO	WAT	W1169	5.238	38.286	-34.421	1.00	38.44	8
ATOM	13671	OWO	WAT	W1170	-35.338	12.422	-24.306	1.00	46.61	8
ATOM	13672	OWO	WAT	W1171	-36.001	2.900	-45.505	1.00	53.22	8
ATOM	13673	OWO	WAT	W1172	-14.682	41.549	-38.783	1.00	30.99	8
ATOM	13674	OWO	WAT	W1173	-3.142	18.540	-6.390	1.00	43.05	8
ATOM	13675	OWO	WAT	W1174	-0.402	45.486	-21.370	1.00	54.54	8
ATOM	13676	OWO	WAT	W1175	-25.611	27.976	-2.166	1.00	35.89	8
ATOM	13677	OWO	WAT	W1176	10.444	16.793	-53.005	1.00	55.01	8
ATOM	13678	OWO	WAT	W1177	35.880	16.603	2.630	1.00	58.94	8
ATOM	13679	OWO	WAT	W1178	25.961	3.240	-28.820	1.00	54.51	8
ATOM	13680	OWO	WAT	W1179	-3.019	28.120	-57.203	1.00	49.66	8
ATOM	13681	OWO	WAT	W1180	18.206	12.345	24.619	1.00	47.39	8
ATOM	13682	OWO	WAT	W1181	7.845	32.621	-36.364	1.00	54.91	8
ATOM	13683	OWO	WAT	W1182	15.119	-10.352	-21.356	1.00	45.01	8
ATOM	13684	OWO	WAT	W1183	-11.448	46.296	-16.376	1.00	66.58	8
ATOM	13685	OWO	WAT	W1184	-21.396	8.537	31.509	1.00	54.57	8
ATOM	13686	OWO	WAT	W1185	-9.076	-18.466	-8.297	1.00	61.17	8
ATOM	13687	OWO	WAT	W1186	32.687	20.994	-12.711	1.00	53.09	8
ATOM	13688	OWO	WAT	W1187	-21.795	36.681	-8.604	1.00	47.06	8
ATOM	13689	OWO	WAT	W1188	-7.671	12.549	-3.379	1.00	33.19	8
ATOM	13690	OWO	WAT	W1189	36.949	21.817	17.286	1.00	55.81	8
ATOM	13691	OWO	WAT	W1190	-27.242	27.931	-23.982	1.00	47.07	8
ATOM	13692	OWO	WAT	W1191	-21.230	9.697	22.074	1.00	68.74	8
ATOM	13693	OWO	WAT	W1192	-36.264	9.277	-48.182	1.00	75.89	8
ATOM	13694	OWO	WAT	W1193	5.646	-18.942	-21.131	1.00	57.91	8
ATOM	13695	OWO	WAT	W1194	7.063	-0.611	-29.824	1.00	71.67	8
ATOM	13696	OWO	WAT	W1195	0.336	17.034	29.592	1.00	65.97	8
ATOM	13697	OWO	WAT	W1196	-6.575	10.925	-18.341	1.00	46.72	8
ATOM	13698	OWO	WAT	W1197	-5.005	32.888	20.603	1.00	48.07	8
ATOM	13699	OWO	WAT	W1198	-18.002	39.490	-31.140	1.00	44.59	8
ATOM	13700	OWO	WAT	W1199	-18.634	39.374	-11.064	1.00	41.56	8
ATOM	13701	OWO	WAT	W1200	-47.338	23.453	8.921	1.00	44.38	8
ATOM	13702	OWO	WAT	W1201	-3.220	9.852	-59.809	1.00	51.21	8
ATOM	13703	OWO	WAT	W1202	0.919	-17.273	-29.081	1.00	49.15	8
ATOM	13704	OWO	WAT	W1203	33.974	17.409	24.005	1.00	67.25	8
ATOM	13705	OWO	WAT	W1204	3.726	-7.026	-40.226	1.00	35.91	8
ATOM	13706	OWO	WAT	W1205	-22.341	34.887	-21.052	1.00	53.73	8
ATOM	13707	OWO	WAT	W1206	-6.168	39.431	2.156	1.00	49.31	8
ATOM	13708	OWO	WAT	W1207	-17.205	35.343	-0.099	1.00	40.61	8
ATOM	13709	OWO	WAT	W1208	0.064	6.913	-16.130	1.00	39.07	8
ATOM	13710	OWO	WAT	W1209	6.540	26.087	-47.373	1.00	50.01	8
ATOM	13711	OWO	WAT	W1210	-9.739	40.076	-11.585	1.00	55.67	8
ATOM	13712	OWO	WAT	W1211	37.942	9.875	-12.501	1.00	42.32	8
ATOM	13713	OWO	WAT	W1212	-16.040	25.734	34.571	1.00	72.28	8
ATOM	13714	OWO	WAT	W1213	33.804	-12.988	-1.859	1.00	47.49	8
ATOM	13715	OWO	WAT	W1214	20.423	44.289	-32.360	1.00	51.72	8
ATOM	13716	OWO	WAT	W1215	13.867	-5.260	-29.941	1.00	38.05	8
ATOM	13717	OWO	WAT	W1216	-33.976	10.317	2.553	1.00	44.20	8
ATOM	13718	OWO	WAT	W1217	-13.492	-24.172	-34.850	1.00	40.71	8
ATOM	13719	OWO	WAT	W1218	-38.753	14.028	4.046	1.00	46.66	8
ATOM	13720	OWO	WAT	W1219	-10.648	10.568	-11.243	1.00	43.54	8
ATOM	13721	OWO	WAT	W1220	-10.109	-1.876	-39.397	1.00	32.40	8
ATOM	13722	OWO	WAT	W1221	-19.206	-11.525	-41.189	1.00	33.14	8
ATOM	13723	OWO	WAT	W1222	-5.848	41.583	-0.654	1.00	40.96	8
ATOM	13724	OWO	WAT	W1223	-4.751	40.434	-2.922	1.00	36.72	8
ATOM	13725	OWO	WAT	W1224	-4.224	-24.156	-13.895	1.00	64.46	8
ATOM	13726	OWO	WAT	W1225	-19.252	38.675	21.350	1.00	45.60	8
ATOM	13727	OWO	WAT	W1226	-22.528	13.045	33.575	1.00	40.21	8
ATOM	13728	OWO	WAT	W1227	10.048	32.769	-0.721	1.00	44.60	8
ATOM	13729	OWO	WAT	W1228	-12.684	-25.862	-36.691	1.00	55.23	8
ATOM	13730	OWO	WAT	W1229	-20.559	-29.056	-23.447	1.00	54.18	8
ATOM	13731	OWO	WAT	W1230	34.792	17.654	-11.777	1.00	39.64	8
ATOM	13732	OWO	WAT	W1231	10.600	34.262	-39.943	1.00	65.29	8
ATOM	13733	OWO	WAT	W1232	-38.003	12.877	-23.839	1.00	34.55	8
ATOM	13734	OWO	WAT	W1233	-9.030	36.313	21.065	1.00	50.06	8
ATOM	13735	OWO	WAT	W1234	-5.320	17.974	-12.445	1.00	52.63	8
ATOM	13736	OWO	WAT	W1235	6.938	9.019	-45.558	1.00	40.53	8
ATOM	13737	OWO	WAT	W1236	5.568	40.179	-37.719	1.00	54.60	8

175/188

ATOM	13738	OWO	WAT	W1237	20.304	27.207	-29.598	1.00	36.48	8
ATOM	13739	OWO	WAT	W1238	15.085	36.392	16.912	1.00	42.73	8
ATOM	13740	OWO	WAT	W1239	9.690	-12.025	3.483	1.00	39.00	8
ATOM	13741	OWO	WAT	W1240	-23.881	-24.346	-22.702	1.00	68.20	8
ATOM	13742	OWO	WAT	W1241	10.174	7.369	25.861	1.00	45.33	8
ATOM	13743	OWO	WAT	W1242	18.797	9.619	24.290	1.00	46.02	8
ATOM	13744	OWO	WAT	W1243	38.243	6.371	-13.317	1.00	60.30	8
ATOM	13745	OWO	WAT	W1244	7.914	-8.356	-39.662	1.00	63.49	8
ATOM	13746	OWO	WAT	W1245	17.924	28.459	28.641	1.00	76.86	8
ATOM	13747	OWO	WAT	W1246	-7.001	-19.400	-35.867	1.00	42.08	8
ATOM	13748	OWO	WAT	W1247	8.690	9.439	-54.346	1.00	63.95	8
ATOM	13749	OWO	WAT	W1248	-32.847	14.001	-27.213	1.00	35.63	8
ATOM	13750	OWO	WAT	W1249	-11.079	28.781	30.879	1.00	60.32	8
ATOM	13751	OWO	WAT	W1250	6.855	10.554	25.036	1.00	48.72	8
ATOM	13752	OWO	WAT	W1251	2.055	44.779	-30.624	1.00	72.70	8
ATOM	13753	OWO	WAT	W1252	-9.460	20.186	-49.705	1.00	41.32	8
ATOM	13754	OWO	WAT	W1253	-26.258	-19.479	-24.788	1.00	42.69	8
ATOM	13755	OWO	WAT	W1254	-2.020	-7.276	-51.483	1.00	75.58	8
ATOM	13756	OWO	WAT	W1255	-29.290	9.937	-45.927	1.00	33.25	8
ATOM	13757	OWO	WAT	W1256	-11.006	20.967	31.345	1.00	55.65	8
ATOM	13758	OWO	WAT	W1257	-32.506	29.854	-25.910	1.00	45.18	8
ATOM	13759	OWO	WAT	W1258	-19.125	-5.403	20.137	1.00	63.56	8
ATOM	13760	OWO	WAT	W1259	18.570	34.597	-23.477	1.00	45.87	8
ATOM	13761	OWO	WAT	W1260	18.961	-21.575	-2.014	1.00	58.58	8
ATOM	13762	OWO	WAT	W1261	-20.550	-25.782	-24.344	1.00	45.48	8
ATOM	13763	OWO	WAT	W1262	-21.286	21.045	24.896	1.00	53.88	8
ATOM	13764	OWO	WAT	W1263	-41.901	26.472	7.641	1.00	37.80	8
ATOM	13765	OWO	WAT	W1264	-24.463	-12.586	5.750	1.00	45.42	8
ATOM	13766	OWO	WAT	W1265	28.986	-19.826	0.137	1.00	52.31	8
ATOM	13767	OWO	WAT	W1266	10.996	2.132	-42.592	1.00	47.00	8
ATOM	13768	OWO	WAT	W1267	-8.538	-18.950	-13.226	1.00	43.24	8
ATOM	13769	OWO	WAT	W1268	-34.271	3.746	5.554	1.00	50.77	8
ATOM	13770	OWO	WAT	W1269	9.459	0.926	19.785	1.00	48.24	8
ATOM	13771	OWO	WAT	W1270	-10.484	-20.396	-12.642	1.00	30.05	8
ATOM	13772	OWO	WAT	W1271	-4.968	1.248	36.861	1.00	38.74	8
ATOM	13773	OWO	WAT	W1272	-28.251	-20.988	-26.463	1.00	52.83	8
ATOM	13774	OWO	WAT	W1273	6.206	-17.263	1.111	1.00	46.69	8
ATOM	13775	OWO	WAT	W1274	-24.333	-17.843	-38.266	1.00	49.89	8
ATOM	13776	OWO	WAT	W1275	10.385	5.060	24.312	1.00	47.15	8
ATOM	13777	OWO	WAT	W1276	-20.914	-7.355	17.899	1.00	62.20	8
ATOM	13778	OWO	WAT	W1277	-16.673	21.392	-48.920	1.00	36.10	8
ATOM	13779	OWO	WAT	W1278	-6.343	24.973	-55.105	1.00	43.40	8
ATOM	13780	OWO	WAT	W1279	-10.962	-4.860	19.411	1.00	50.02	8
ATOM	13781	OWO	WAT	W1280	34.905	22.233	22.905	1.00	43.27	8
ATOM	13782	OWO	WAT	W1281	26.256	21.505	-9.103	1.00	49.88	8
ATOM	13783	OWO	WAT	W1282	19.615	28.115	30.766	1.00	56.60	8
ATOM	13784	OWO	WAT	W1283	-5.419	33.759	-40.435	1.00	32.43	8
ATOM	13785	OWO	WAT	W1284	-12.850	46.033	-22.716	1.00	46.71	8
ATOM	13786	OWO	WAT	W1285	-8.425	36.669	10.205	1.00	44.82	8
ATOM	13787	OWO	WAT	W1286	0.153	29.060	-19.804	1.00	32.09	8
ATOM	13788	OWO	WAT	W1287	23.747	31.994	-26.466	1.00	52.08	8
ATOM	13789	OWO	WAT	W1288	22.043	25.383	-25.708	1.00	69.13	8
ATOM	13790	OWO	WAT	W1289	-33.293	23.748	-14.749	1.00	53.91	8
ATOM	13791	OWO	WAT	W1290	-7.942	42.792	13.189	1.00	49.65	8
ATOM	13792	OWO	WAT	W1291	-11.579	40.266	-1.131	1.00	39.41	8
ATOM	13793	OWO	WAT	W1292	-28.587	-5.426	6.743	1.00	46.65	8
ATOM	13794	OWO	WAT	W1293	0.840	7.274	-11.737	1.00	46.20	8
ATOM	13795	OWO	WAT	W1294	35.124	-1.714	-2.088	1.00	37.78	8
ATOM	13796	OWO	WAT	W1295	20.877	-5.769	-26.303	1.00	48.40	8
ATOM	13797	OWO	WAT	W1296	-1.981	7.188	-61.263	1.00	61.25	8
ATOM	13798	OWO	WAT	W1297	-39.691	-6.647	-27.006	1.00	54.08	8
ATOM	13799	OWO	WAT	W1298	-25.553	10.410	33.705	1.00	69.01	8
ATOM	13800	OWO	WAT	W1299	16.311	-4.821	-31.128	1.00	51.81	8
ATOM	13801	OWO	WAT	W1300	1.305	30.047	-48.068	1.00	69.76	8
ATOM	13802	OWO	WAT	W1301	-7.943	28.356	-51.724	1.00	37.05	8
ATOM	13803	OWO	WAT	W1302	2.384	15.226	-6.331	1.00	48.79	8
ATOM	13804	OWO	WAT	W1303	0.213	-17.311	6.020	1.00	46.28	8
ATOM	13805	OWO	WAT	W1304	-19.507	13.621	-50.593	1.00	48.47	8
ATOM	13806	OWO	WAT	W1305	20.291	-21.088	-6.492	1.00	43.08	8
ATOM	13807	OWO	WAT	W1306	-43.375	-7.635	-33.313	1.00	54.59	8
ATOM	13808	OWO	WAT	W1307	2.270	45.432	-33.259	1.00	73.36	8
ATOM	13809	OWO	WAT	W1308	-8.425	42.990	-1.579	1.00	78.90	8
ATOM	13810	OWO	WAT	W1309	-9.059	-9.663	35.786	1.00	52.85	8
ATOM	13811	OWO	WAT	W1310	24.305	24.841	-18.127	1.00	49.90	8
ATOM	13812	OWO	WAT	W1311	18.715	20.954	25.848	1.00	39.29	8
ATOM	13813	OWO	WAT	W1312	20.799	-8.276	-22.609	1.00	69.65	8
ATOM	13814	OWO	WAT	W1313	26.399	22.890	-19.580	1.00	47.87	8
ATOM	13815	OWO	WAT	W1314	0.357	-7.443	-39.592	1.00	34.31	8
ATOM	13816	OWO	WAT	W1315	-42.644	11.431	-40.604	1.00	36.69	8

176/188

ATOM	13817	OWO	WAT	W1316	-3.443	-13.172	-30.490	1.00	38.52	8
ATOM	13818	OWO	WAT	W1317	24.012	27.012	-27.546	1.00	57.58	8
ATOM	13819	OWO	WAT	W1318	-41.470	-7.914	-36.107	1.00	63.46	8
ATOM	13820	OWO	WAT	W1319	2.134	41.171	-21.689	1.00	50.99	8
ATOM	13821	OWO	WAT	W1320	-3.675	-20.793	-8.277	1.00	64.59	8
ATOM	13822	OWO	WAT	W1321	-10.847	-6.356	21.565	1.00	57.72	8
ATOM	13823	OWO	WAT	W1322	-24.283	33.784	11.580	1.00	67.45	8
ATOM	13824	OWO	WAT	W1323	-33.865	25.058	-6.287	1.00	51.64	8
ATOM	13825	OWO	WAT	W1324	17.351	-5.163	-28.417	1.00	45.68	8
ATOM	13826	OWO	WAT	W1325	10.507	21.579	20.503	1.00	49.93	8
ATOM	13827	OWO	WAT	W1326	-9.385	6.091	-47.584	1.00	54.31	8
ATOM	13828	OWO	WAT	W1327	34.497	-11.934	-4.453	1.00	55.34	8
ATOM	13829	OWO	WAT	W1328	-6.162	48.077	-40.260	1.00	68.13	8
ATOM	13830	OWO	WAT	W1329	-6.182	41.291	19.510	1.00	59.69	8
ATOM	13831	OWO	WAT	W1330	-30.438	-18.296	-24.739	1.00	54.02	8
ATOM	13832	OWO	WAT	W1331	-38.479	24.587	2.617	1.00	58.94	8
ATOM	13833	OWO	WAT	W1332	-11.126	-21.201	-0.381	1.00	55.07	8
ATOM	13834	OWO	WAT	W1333	-41.064	-1.107	-42.463	1.00	38.21	8
ATOM	13835	OWO	WAT	W1334	12.481	17.817	25.187	1.00	56.14	8
ATOM	13836	OWO	WAT	W1335	33.203	-6.416	-9.086	1.00	46.00	8
ATOM	13837	OWO	WAT	W1336	-31.916	0.770	-2.213	1.00	44.83	8
ATOM	13838	OWO	WAT	W1337	33.997	-4.612	1.451	1.00	40.99	8
ATOM	13839	OWO	WAT	W1338	26.762	20.273	-19.080	1.00	84.45	8
ATOM	13840	OWO	WAT	W1339	-6.292	3.162	37.498	1.00	51.06	8
ATOM	13841	OWO	WAT	W1340	-27.237	-20.007	-0.985	1.00	51.25	8
ATOM	13842	OWO	WAT	W1341	7.537	9.524	22.844	1.00	53.68	8
ATOM	13843	OWO	WAT	W1342	9.392	18.291	23.289	1.00	47.98	8
ATOM	13844	OWO	WAT	W1343	-39.469	6.998	-27.202	1.00	56.94	8
ATOM	13845	OWO	WAT	W1344	-5.208	5.592	-2.961	1.00	45.58	8
ATOM	13846	OWO	WAT	W1345	4.183	-17.231	-3.414	1.00	38.53	8
ATOM	13847	OWO	WAT	W1346	12.874	37.120	-2.939	1.00	89.39	8
ATOM	13848	OWO	WAT	W1347	-11.472	-14.896	6.741	1.00	45.12	8
ATOM	13849	OWO	WAT	W1348	-42.961	5.171	-8.207	1.00	58.41	8
ATOM	13850	OWO	WAT	W1349	-18.052	11.926	-39.577	1.00	44.84	8
ATOM	13851	OWO	WAT	W1350	-2.032	-20.209	-40.075	1.00	67.07	8
ATOM	13852	OWO	WAT	W1351	-26.939	-24.377	-22.585	1.00	89.06	8
ATOM	13853	OWO	WAT	W1352	-8.338	-26.592	-36.187	1.00	41.23	8
ATOM	13854	OWO	WAT	W1353	-6.293	25.114	-12.679	1.00	59.02	8
ATOM	13855	OWO	WAT	W1354	-26.887	18.401	18.291	1.00	49.80	8
ATOM	13856	OWO	WAT	W1355	23.189	14.457	-31.397	1.00	56.23	8
ATOM	13857	OWO	WAT	W1356	29.205	-4.105	-24.875	1.00	62.45	8
ATOM	13858	OWO	WAT	W1357	-22.610	23.539	-40.477	1.00	60.62	8
ATOM	13859	OWO	WAT	W1358	-17.436	36.053	-4.285	1.00	57.43	8
ATOM	13860	OWO	WAT	W1359	8.274	28.521	-53.351	1.00	59.59	8
ATOM	13861	OWO	WAT	W1360	-0.889	-4.705	36.184	1.00	38.78	8
ATOM	13862	OWO	WAT	W1361	-8.211	2.041	40.008	1.00	47.41	8
ATOM	13863	OWO	WAT	W1362	1.813	24.676	20.909	1.00	41.50	8
ATOM	13864	OWO	WAT	W1363	6.867	25.805	-53.852	1.00	61.27	8
ATOM	13865	OWO	WAT	W1364	-3.836	-12.957	-34.976	1.00	60.85	8
ATOM	13866	OWO	WAT	W1365	1.464	-10.537	-48.927	1.00	57.96	8
ATOM	13867	OWO	WAT	W1366	13.469	38.194	10.268	1.00	46.25	8
ATOM	13868	OWO	WAT	W1367	-43.472	25.097	-24.335	1.00	58.13	8
ATOM	13869	OWO	WAT	W1368	-1.385	40.753	-15.910	1.00	45.85	8
ATOM	13870	OWO	WAT	W1369	5.180	-8.640	-44.262	1.00	47.94	8
ATOM	13871	OWO	WAT	W1370	38.326	12.740	-14.670	1.00	51.01	8
ATOM	13872	OWO	WAT	W1371	-4.341	-3.206	-46.165	1.00	47.42	8
ATOM	13873	OWO	WAT	W1372	-14.983	15.811	13.680	1.00	26.19	8
ATOM	13874	OWO	WAT	W1373	-23.714	-10.268	6.213	1.00	22.06	8
ATOM	13875	OWO	WAT	W1374	21.544	30.258	-11.639	1.00	19.94	8
ATOM	13876	OWO	WAT	W1375	34.747	13.031	-7.178	1.00	29.23	8
ATOM	13877	OWO	WAT	W1376	34.461	-2.048	2.469	1.00	26.27	8
ATOM	13878	OWO	WAT	W1377	-6.716	42.281	-22.764	1.00	33.14	8
ATOM	13879	OWO	WAT	W1378	30.753	1.191	12.891	1.00	49.85	8
ATOM	13880	OWO	WAT	W1379	21.800	-12.784	-9.117	1.00	59.59	8
ATOM	13881	OWO	WAT	W1380	31.982	10.569	6.919	1.00	44.32	8
ATOM	13882	OWO	WAT	W1381	23.832	-10.805	-9.336	1.00	56.72	8
ATOM	13883	OWO	WAT	W1382	-16.202	34.223	-3.292	1.00	39.68	8
ATOM	13884	OWO	WAT	W1383	26.514	-9.063	-9.610	1.00	34.72	8
ATOM	13885	OWO	WAT	W1384	6.253	44.082	-2.048	1.00	37.64	8
ATOM	13886	OWO	WAT	W1385	-22.378	31.959	3.550	1.00	38.83	8
ATOM	13887	OWO	WAT	W1386	21.288	30.867	0.837	1.00	33.62	8
ATOM	13888	OWO	WAT	W1387	10.847	29.620	26.853	1.00	49.86	8
ATOM	13889	OWO	WAT	W1388	35.336	15.979	19.139	1.00	27.76	8
ATOM	13890	OWO	WAT	W1389	-41.921	-2.002	-22.985	1.00	60.02	8
ATOM	13891	OWO	WAT	W1390	-42.246	18.082	5.496	1.00	43.19	8
ATOM	13892	OWO	WAT	W1391	36.695	0.484	-8.878	1.00	47.28	8
ATOM	13893	OWO	WAT	W1392	17.529	36.865	-13.233	1.00	38.94	8
ATOM	13894	OWO	WAT	W1393	-5.988	22.648	-12.618	1.00	45.83	8
ATOM	13895	OWO	WAT	W1394	4.691	-17.996	-13.329	1.00	31.14	8

177/188

ATOM	13896	OWO	WAT	W1395	-25.579	29.345	12.078	1.00	41.09	8
ATOM	13897	OWO	WAT	W1396	35.820	10.665	-16.450	1.00	35.03	8
ATOM	13898	OWO	WAT	W1397	18.831	38.201	-20.772	1.00	61.37	8
ATOM	13899	OWO	WAT	W1398	-14.314	3.139	-42.665	1.00	54.21	8
ATOM	13900	OWO	WAT	W1399	-24.235	8.961	23.628	1.00	60.34	8
ATOM	13901	OWO	WAT	W1400	-6.555	1.658	-44.432	1.00	65.45	8
ATOM	13902	OWO	WAT	W1401	33.955	-2.363	9.855	1.00	35.24	8
ATOM	13903	OWO	WAT	W1402	1.288	46.524	-28.685	1.00	52.74	8
ATOM	13904	OWO	WAT	W1403	-39.109	24.423	-29.733	1.00	51.16	8
ATOM	13905	OWO	WAT	W1404	3.517	-10.695	-46.774	1.00	49.05	8
ATOM	13906	OWO	WAT	W1405	-34.630	30.754	-34.539	1.00	31.56	8
ATOM	13907	OWO	WAT	W1406	12.316	4.167	-50.401	1.00	62.80	8
ATOM	13908	OWO	WAT	W1407	36.404	-6.225	2.482	1.00	47.17	8
ATOM	13909	OWO	WAT	W1408	12.317	31.968	-41.810	1.00	44.94	8
ATOM	13910	OWO	WAT	W1409	-1.625	43.955	-24.844	1.00	43.34	8
ATOM	13911	OWO	WAT	W1410	29.505	8.694	6.582	1.00	32.04	8
ATOM	13912	OWO	WAT	W1411	7.063	-19.464	-10.288	1.00	42.89	8
ATOM	13913	OWO	WAT	W1412	-29.519	-14.243	-1.209	1.00	73.05	8
ATOM	13914	OWO	WAT	W1413	35.748	11.338	2.641	1.00	56.46	8
ATOM	13915	OWO	WAT	W1414	4.144	26.998	-54.452	1.00	56.70	8
ATOM	13916	OWO	WAT	W1415	-25.518	-10.097	3.652	1.00	44.44	8
ATOM	13917	OWO	WAT	W1416	13.075	31.161	2.601	1.00	46.45	8
ATOM	13918	OWO	WAT	W1417	-10.423	-24.677	-36.832	1.00	41.98	8
ATOM	13919	OWO	WAT	W1418	-13.254	46.877	-17.968	1.00	58.74	8
ATOM	13920	OWO	WAT	W1419	-33.086	29.805	-33.076	1.00	55.31	8
ATOM	13921	OWO	WAT	W1420	15.016	40.393	-10.338	1.00	48.88	8
ATOM	13922	OWO	WAT	W1421	-21.547	-12.592	-42.011	1.00	50.78	8
ATOM	13923	OWO	WAT	W1422	-5.554	-12.934	-36.704	1.00	59.06	8
ATOM	13924	OWO	WAT	W1423	-42.812	2.070	-37.818	1.00	42.92	8
ATOM	13925	OWO	WAT	W1424	8.543	-3.359	17.787	1.00	49.86	8
ATOM	13926	OWO	WAT	W1425	-14.825	0.645	-25.037	1.00	62.28	8
ATOM	13927	OWO	WAT	W1426	-41.562	10.339	-27.528	1.00	52.68	8
ATOM	13928	OWO	WAT	W1427	-32.905	29.531	-15.837	1.00	65.81	8
ATOM	13929	OWO	WAT	W1428	36.151	-1.056	-6.899	1.00	53.49	8
ATOM	13930	OWO	WAT	W1429	-1.636	9.143	-18.969	1.00	38.15	8
ATOM	13931	OWO	WAT	W1430	-20.657	20.750	-37.187	1.00	53.77	8
ATOM	13932	OWO	WAT	W1431	-8.360	14.634	33.948	1.00	41.73	8
ATOM	13933	OWO	WAT	W1432	39.013	10.575	-9.816	1.00	60.57	8
ATOM	13934	OWO	WAT	W1433	5.294	-16.086	3.086	1.00	49.62	8
ATOM	13935	OWO	WAT	W1434	15.700	35.500	8.135	1.00	34.13	8
ATOM	13936	OWO	WAT	W1435	12.443	37.886	12.922	1.00	70.46	8
ATOM	13937	OWO	WAT	W1436	-11.770	-16.791	4.787	1.00	50.65	8
ATOM	13938	OWO	WAT	W1437	7.416	-1.508	-49.741	1.00	57.31	8
ATOM	13939	OWO	WAT	W1438	2.319	-11.557	30.568	1.00	69.00	8
ATOM	13940	OWO	WAT	W1439	-14.563	40.530	20.578	1.00	36.09	8
ATOM	13941	OWO	WAT	W1440	-22.621	29.392	-36.096	1.00	56.17	8
ATOM	13942	OWO	WAT	W1441	-37.309	26.025	-27.062	1.00	57.00	8
ATOM	13943	OWO	WAT	W1442	-38.089	12.668	-18.736	1.00	48.84	8
ATOM	13944	OWO	WAT	W1443	-33.014	16.767	-18.998	1.00	56.05	8
ATOM	13945	OWO	WAT	W1444	6.326	-17.671	23.460	1.00	46.08	8
ATOM	13946	OWO	WAT	W1445	24.518	23.037	27.533	1.00	44.46	8
ATOM	13947	OWO	WAT	W1446	-37.458	14.780	-22.473	1.00	37.62	8
ATOM	13948	OWO	WAT	W1447	10.238	45.782	-16.709	1.00	56.81	8
ATOM	13949	OWO	WAT	W1448	37.620	-2.189	-15.195	1.00	67.60	8
ATOM	13950	OWO	WAT	W1449	36.653	-4.968	-22.211	1.00	70.37	8
ATOM	13951	OWO	WAT	W1450	0.041	-7.477	37.343	1.00	74.16	8
ATOM	13952	OWO	WAT	W1451	2.087	45.145	-22.641	1.00	43.02	8
ATOM	13953	OWO	WAT	W1452	22.997	29.599	2.668	1.00	47.65	8
ATOM	13954	OWO	WAT	W1453	-43.776	11.751	-27.935	1.00	50.30	8
ATOM	13955	OWO	WAT	W1454	36.623	-0.910	4.240	1.00	54.14	8
ATOM	13956	OWO	WAT	W1455	-39.549	10.716	-20.762	1.00	43.92	8
ATOM	13957	OWO	WAT	W1456	37.977	-4.304	4.747	1.00	47.88	8
ATOM	13958	OWO	WAT	W1457	-18.614	11.424	34.048	1.00	36.94	8
ATOM	13959	OWO	WAT	W1458	21.547	32.938	-12.478	1.00	48.68	8
ATOM	13960	OWO	WAT	W1459	37.160	5.746	9.552	1.00	52.12	8
ATOM	13961	OWO	WAT	W1460	36.426	16.898	-18.319	1.00	48.66	8
ATOM	13962	OWO	WAT	W1461	2.116	40.023	-35.071	1.00	48.86	8
ATOM	13963	OWO	WAT	W1462	8.099	-3.413	25.344	1.00	55.60	8
ATOM	13964	OWO	WAT	W1463	3.856	-11.401	-31.866	1.00	55.30	8
ATOM	13965	OWO	WAT	W1464	-24.977	31.423	-12.001	1.00	53.54	8
ATOM	13966	OWO	WAT	W1465	-8.825	0.863	-42.646	1.00	53.96	8
ATOM	13967	OWO	WAT	W1466	-10.233	41.968	-13.562	1.00	45.25	8
ATOM	13968	OWO	WAT	W1467	-32.650	26.361	-3.736	1.00	54.76	8
ATOM	13969	OWO	WAT	W1468	-2.990	41.261	-18.092	1.00	54.90	8
ATOM	13970	OWO	WAT	W1469	40.162	8.234	15.150	1.00	56.77	8
ATOM	13971	OWO	WAT	W1470	34.154	8.885	9.019	1.00	46.94	8
ATOM	13972	OWO	WAT	W1471	-45.130	6.938	-43.602	1.00	39.74	8
ATOM	13973	OWO	WAT	W1472	-16.350	-20.708	-4.722	1.00	53.18	8
ATOM	13974	OWO	WAT	W1473	37.455	18.685	-9.946	1.00	78.46	8

178/188

ATOM	13975	OWO	WAT	W1474	4.748	3.981	30.950	1.00	39.83	8
ATOM	13976	OWO	WAT	W1475	-5.507	-15.236	-38.318	1.00	56.40	8
ATOM	13977	OWO	WAT	W1476	-23.157	31.225	24.479	1.00	60.02	8
ATOM	13978	OWO	WAT	W1477	-28.205	-17.218	-21.489	1.00	49.58	8
ATOM	13979	OWO	WAT	W1478	-4.341	-26.457	-26.022	1.00	49.82	8
ATOM	13980	OWO	WAT	W1479	-39.192	-9.177	-36.563	1.00	61.79	8
ATOM	13981	OWO	WAT	W1480	-10.616	-20.949	-15.160	1.00	61.69	8
ATOM	13982	OWO	WAT	W1481	13.481	3.291	11.910	1.00	38.61	8
ATOM	13983	OWO	WAT	W1482	-23.759	-22.972	-20.050	1.00	50.41	8
ATOM	13984	OWO	WAT	W1483	-20.050	40.139	-32.804	1.00	49.06	8
ATOM	13985	OWO	WAT	W1484	-30.239	23.161	3.132	1.00	48.92	8
ATOM	13986	OWO	WAT	W1485	7.643	-7.764	14.424	1.00	43.86	8
ATOM	13987	OWO	WAT	W1486	7.544	22.843	-56.208	1.00	59.99	8
ATOM	13988	OWO	WAT	W1487	-37.529	14.942	-3.561	1.00	42.81	8
ATOM	13989	OWO	WAT	W1488	-8.972	9.268	-12.406	1.00	47.90	8
ATOM	13990	OWO	WAT	W1489	30.134	20.031	-19.168	1.00	56.95	8
ATOM	13991	OWO	WAT	W1490	28.634	13.982	23.140	1.00	69.77	8
ATOM	13992	OWO	WAT	W1491	-21.241	13.381	-52.835	1.00	54.22	8
ATOM	13993	OWO	WAT	W1492	-12.438	-2.220	38.929	1.00	74.14	8
ATOM	13994	OWO	WAT	W1493	-14.269	-5.974	23.288	1.00	35.74	8
ATOM	13995	OWO	WAT	W1494	26.289	-7.775	-16.018	1.00	47.58	8
ATOM	13996	OWO	WAT	W1495	34.066	-3.108	12.548	1.00	52.00	8
ATOM	13997	OWO	WAT	W1496	-14.646	-31.405	-29.324	1.00	72.44	8
ATOM	13998	OWO	WAT	W1497	25.374	15.469	-35.362	1.00	61.18	8
ATOM	13999	OWO	WAT	W1498	15.954	12.722	-41.843	1.00	57.15	8
ATOM	14000	OWO	WAT	W1499	-7.203	6.634	-13.615	1.00	62.90	8
ATOM	14001	OWO	WAT	W1500	-23.086	12.053	22.613	1.00	63.67	8
ATOM	14002	OWO	WAT	W1501	36.052	8.971	-3.572	1.00	64.39	8
ATOM	14003	OWO	WAT	W1502	-18.245	44.556	-13.243	1.00	57.73	8
ATOM	14004	OWO	WAT	W1503	-2.969	3.803	-18.490	1.00	67.79	8
ATOM	14005	OWO	WAT	W1504	-27.749	26.488	-2.282	1.00	43.52	8
ATOM	14006	OWO	WAT	W1505	-19.728	-17.953	5.794	1.00	39.42	8
ATOM	14007	OWO	WAT	W1506	32.481	-4.815	-7.148	1.00	60.48	8
ATOM	14008	OWO	WAT	W1507	-25.645	-28.659	-17.109	1.00	58.40	8
ATOM	14009	OWO	WAT	W1508	-35.016	-9.663	-34.379	1.00	53.15	8
ATOM	14010	OWO	WAT	W1509	-19.287	17.280	-40.314	1.00	47.47	8
ATOM	14011	OWO	WAT	W1510	31.746	14.504	22.063	1.00	63.18	8
ATOM	14012	OWO	WAT	W1511	-3.323	-22.319	-16.601	1.00	57.20	8
ATOM	14013	OWO	WAT	W1512	-25.853	3.687	-45.599	1.00	55.53	8
ATOM	14014	OWO	WAT	W1513	-29.094	-18.626	-27.695	1.00	43.45	8
ATOM	14015	OWO	WAT	W1514	36.081	13.947	-2.426	1.00	40.26	8
ATOM	14017	OWO	WAT	W1515	-18.770	-21.204	-9.620	1.00	53.25	8
ATOM	14018	OWO	WAT	W1516	-4.207	0.165	-10.884	1.00	56.38	8
ATOM	14019	OWO	WAT	W1517	-18.729	18.492	2.801	1.00	31.83	8
ATOM	14020	OWO	WAT	W1518	-10.959	-12.063	-45.732	1.00	72.69	8
ATOM	14021	OWO	WAT	W1519	-0.019	33.161	-52.470	1.00	55.38	8
ATOM	14022	OWO	WAT	W1520	-6.360	45.076	-41.331	1.00	63.14	8
ATOM	14023	OWO	WAT	W1521	11.666	-1.577	-37.249	1.00	65.38	8
ATOM	14024	OWO	WAT	W1522	28.576	2.406	-27.859	1.00	48.42	8
ATOM	14025	OWO	WAT	W1523	-17.204	-19.417	-8.647	1.00	47.80	8
ATOM	14026	OWO	WAT	W1524	11.504	-7.340	20.048	1.00	47.40	8
ATOM	14027	OWO	WAT	W1525	-6.807	4.227	-57.520	1.00	61.72	8
ATOM	14028	OWO	WAT	W1526	-33.200	30.257	-36.553	1.00	83.13	8
ATOM	14029	OWO	WAT	W1527	-12.461	2.605	-47.634	1.00	57.62	8
ATOM	14030	OWO	WAT	W1528	19.655	-6.604	-18.180	1.00	41.03	8
ATOM	14031	OWO	WAT	W1529	-29.989	-18.416	-36.523	1.00	44.27	8
ATOM	14032	OWO	WAT	W1530	23.842	8.885	-25.845	1.00	43.21	8
ATOM	14033	OWO	WAT	W1531	24.350	11.497	22.450	1.00	53.02	8
ATOM	14034	OWO	WAT	W1532	24.354	33.151	-13.346	1.00	47.15	8
ATOM	14035	OWO	WAT	W1533	-22.894	39.661	-32.585	1.00	66.55	8
ATOM	14036	OWO	WAT	W1534	-38.505	9.195	-23.366	1.00	52.72	8
ATOM	14037	OWO	WAT	W1535	2.076	7.103	32.830	1.00	48.43	8
ATOM	14038	OWO	WAT	W1536	-9.074	16.904	-55.002	1.00	50.53	8
ATOM	14039	OWO	WAT	W1537	-9.028	2.650	-45.080	1.00	63.52	8
ATOM	14040	OWO	WAT	W1538	-22.005	32.241	-27.685	1.00	52.58	8
ATOM	14041	OWO	WAT	W1539	-19.719	-9.910	-14.007	1.00	40.93	8
ATOM	14042	OWO	WAT	W1540	-17.294	-28.359	-6.829	1.00	39.09	8
ATOM	14043	OWO	WAT	W1541	26.538	8.255	21.058	1.00	59.59	8
ATOM	14044	OWO	WAT	W1542	-12.593	32.217	-45.858	1.00	43.02	8
ATOM	14045	OWO	WAT	W1543	-2.881	-18.690	15.819	1.00	46.66	8
ATOM	14046	OWO	WAT	W1544	26.116	-17.057	-6.617	1.00	61.10	8
ATOM	14047	OWO	WAT	W1545	-6.632	5.463	-6.567	1.00	59.09	8
ATOM	14048	OWO	WAT	W1546	7.052	22.421	18.419	1.00	45.22	8
ATOM	14049	OWO	WAT	W1547	37.065	-1.529	6.839	1.00	63.03	8
ATOM	14050	OWO	WAT	W1548	17.794	3.434	-37.646	1.00	59.93	8
ATOM	14051	OWO	WAT	W1549	-26.889	20.474	21.776	1.00	53.71	8
ATOM	14052	OWO	WAT	W1550	-32.655	6.382	1.629	1.00	41.18	8
ATOM	14053	OWO	WAT	W1551	20.903	30.086	-14.898	1.00	42.55	8
ATOM	14054	OWO	WAT	W1552	-36.713	17.558	-2.138	1.00	39.96	8

179/188

ATOM	14055	OWO	WAT	W1553	-19.551	6.415	-48.967	1.00	58.06	8
ATOM	14056	OWO	WAT	W1554	14.441	-12.042	28.689	1.00	43.07	8
ATOM	14057	OWO	WAT	W1555	-35.142	29.909	-39.345	1.00	55.77	8
ATOM	14058	OWO	WAT	W1556	-32.715	-17.016	-23.388	1.00	62.61	8
ATOM	14059	OWO	WAT	W1557	-44.765	23.292	8.031	1.00	49.90	8
ATOM	14060	OWO	WAT	W1558	16.692	31.411	21.019	1.00	36.43	8
ATOM	14061	OWO	WAT	W1559	-30.646	25.870	-11.778	1.00	37.60	8
ATOM	14062	OWO	WAT	W1560	-13.487	-33.825	-30.041	1.00	57.20	8
ATOM	14063	OWO	WAT	W1561	-26.430	-10.011	-1.095	1.00	45.87	8
ATOM	14064	OWO	WAT	W1562	-20.544	39.964	18.970	1.00	56.57	8
ATOM	14065	OWO	WAT	W1563	6.788	-10.336	13.601	1.00	49.68	8
ATOM	14066	OWO	WAT	W1564	27.297	-30.022	13.252	1.00	50.08	8
ATOM	14067	OWO	WAT	W1565	-39.440	11.969	-6.864	1.00	78.88	8
ATOM	14068	OWO	WAT	W1566	18.452	-7.297	-23.723	1.00	36.69	8
ATOM	14069	OWO	WAT	W1567	-10.861	-16.025	14.308	1.00	56.61	8
ATOM	14070	OWO	WAT	W1568	3.098	7.518	-7.880	1.00	40.56	8
ATOM	14071	OWO	WAT	W1569	23.182	33.877	16.880	1.00	56.99	8
ATOM	14072	OWO	WAT	W1570	-19.835	-31.243	-5.350	1.00	46.13	8
ATOM	14073	OWO	WAT	W1571	-9.998	-1.114	-53.544	1.00	64.88	8
ATOM	14074	OWO	WAT	W1572	-38.491	9.950	-4.998	1.00	43.82	8
ATOM	14075	OWO	WAT	W1573	-22.929	36.810	-31.936	1.00	56.40	8
ATOM	14076	OWO	WAT	W1574	-21.739	-5.161	19.901	1.00	79.46	8
ATOM	14077	OWO	WAT	W1575	-2.934	-2.192	-11.577	1.00	53.32	8
ATOM	14078	OWO	WAT	W1576	1.930	3.083	-55.513	1.00	52.05	8
ATOM	14079	OWO	WAT	W1577	-33.479	23.230	-0.422	1.00	55.13	8
ATOM	14080	OWO	WAT	W1578	-8.833	-3.605	-41.372	1.00	45.41	8
ATOM	14081	OWO	WAT	W1579	24.793	-19.506	-6.924	1.00	54.02	8
ATOM	14082	OWO	WAT	W1580	34.848	-4.653	-5.031	1.00	59.02	8
ATOM	14083	OWO	WAT	W1581	-9.326	6.577	-2.500	1.00	45.27	8
ATOM	14084	OWO	WAT	W1582	-34.017	21.907	-10.095	1.00	57.91	8
ATOM	14085	OWO	WAT	W1583	10.450	-6.119	-36.930	1.00	53.71	8
ATOM	14086	OWO	WAT	W1584	17.062	-8.252	-19.822	1.00	54.09	8
ATOM	14087	OWO	WAT	W1585	-10.074	-18.992	4.066	1.00	68.28	8
ATOM	14088	OWO	WAT	W1586	-32.254	26.353	-13.538	1.00	60.32	8
ATOM	14089	OWO	WAT	W1587	-26.476	40.759	-28.429	1.00	85.74	8
ATOM	14090	OWO	WAT	W1588	-7.254	9.706	35.933	1.00	65.77	8
ATOM	14091	OWO	WAT	W1589	3.347	14.375	28.005	1.00	62.31	8
ATOM	14092	OWO	WAT	W1590	-16.017	44.920	-14.527	1.00	57.13	8
ATOM	14093	OWO	WAT	W1591	-4.941	41.678	-20.061	1.00	53.26	8
ATOM	14094	OWO	WAT	W1592	-33.586	23.946	-2.944	1.00	54.99	8
ATOM	14095	OWO	WAT	W1593	17.840	-2.669	-29.515	1.00	63.02	8
ATOM	14096	OWO	WAT	W1594	-36.693	10.364	3.923	1.00	53.04	8
ATOM	14097	OWO	WAT	W1595	-20.823	19.843	-42.842	1.00	51.37	8
ATOM	14098	OWO	WAT	W1596	33.624	5.885	21.824	1.00	26.21	8
ATOM	14099	OWO	WAT	W1597	12.435	-4.010	-38.411	1.00	77.66	8
ATOM	14100	OWO	WAT	W1598	38.776	-6.230	0.148	1.00	60.22	8
ATOM	14101	OWO	WAT	W1599	19.324	20.994	-41.117	1.00	50.77	8
ATOM	14102	OWO	WAT	W1600	7.759	-15.569	2.567	1.00	48.25	8
ATOM	14103	OWO	WAT	W1601	-21.226	18.985	-39.203	1.00	68.46	8
ATOM	14104	OWO	WAT	W1602	8.691	-6.327	-34.287	1.00	53.54	8
ATOM	14105	OWO	WAT	W1603	38.087	5.555	6.522	1.00	50.44	8
ATOM	14106	OWO	WAT	W1604	36.648	10.164	-1.126	1.00	58.63	8
ATOM	14107	OWO	WAT	W1605	0.189	10.691	-4.259	1.00	59.04	8
ATOM	14108	OWO	WAT	W1606	-10.282	4.070	-50.622	1.00	70.94	8
ATOM	14109	OWO	WAT	W1607	-22.499	-12.608	11.372	1.00	52.39	8
ATOM	14110	OWO	WAT	W1608	-22.919	-24.899	-0.389	1.00	59.21	8
ATOM	14111	OWO	WAT	W1609	-11.351	6.426	-0.868	1.00	35.50	8
ATOM	14112	OWO	WAT	W1610	-3.473	-25.865	-19.772	1.00	61.82	8
ATOM	14113	OWO	WAT	W1611	0.336	-20.875	-37.737	1.00	46.30	8
ATOM	14114	OWO	WAT	W1612	-12.171	7.674	-53.993	1.00	57.48	8
ATOM	14115	OWO	WAT	W1613	18.597	-0.194	-31.535	1.00	93.39	8
ATOM	14116	OWO	WAT	W1614	3.774	-18.168	15.809	1.00	37.66	8
ATOM	14117	OWO	WAT	W1615	0.168	9.764	-16.021	1.00	56.01	8
ATOM	14118	OWO	WAT	W1616	-5.454	15.769	-5.313	1.00	44.44	8
ATOM	14119	OWO	WAT	W1617	2.206	42.395	-5.347	1.00	53.85	8
ATOM	14120	OWO	WAT	W1618	-26.382	38.072	-29.440	1.00	68.41	8
ATOM	14121	OWO	WAT	W1619	27.655	31.745	-12.306	1.00	50.77	8
ATOM	14122	OWO	WAT	W1620	-3.869	-26.735	-22.056	1.00	42.63	8
ATOM	14123	OWO	WAT	W1621	20.946	21.972	-39.315	1.00	52.90	8
ATOM	14124	OWO	WAT	W1622	-28.200	21.881	-45.060	1.00	64.80	8
ATOM	14125	OWO	WAT	W1623	-4.118	31.682	9.460	1.00	42.34	8
ATOM	14126	OWO	WAT	W1624	-30.043	-33.722	-8.338	1.00	52.94	8
ATOM	14127	OWO	WAT	W1625	-22.043	-8.424	14.124	1.00	45.67	8
ATOM	14128	OWO	WAT	W1626	-3.381	42.962	-5.029	1.00	73.06	8
ATOM	14129	OWO	WAT	W1627	4.905	12.358	28.900	1.00	76.17	8
ATOM	14130	OWO	WAT	W1628	-44.353	17.375	-36.467	1.00	56.85	8
ATOM	14131	OWO	WAT	W1629	15.065	21.694	29.892	1.00	55.32	8
ATOM	14132	OWO	WAT	W1630	-31.082	-34.137	-6.040	1.00	75.51	8
ATOM	14133	OWO	WAT	W1631	22.452	20.038	-26.073	1.00	63.82	8

180/188

ATOM	14134	OWO	WAT	W1632	10.860	-0.153	18.102	1.00	43.76	8
ATOM	14135	OWO	WAT	W1633	-5.471	17.366	1.303	1.00	52.36	8
ATOM	14136	OWO	WAT	W1634	28.069	14.492	-21.015	1.00	75.25	8
ATOM	14137	OWO	WAT	W1635	-40.912	-8.761	-29.970	1.00	74.41	8
ATOM	14138	OWO	WAT	W1636	-39.673	16.464	16.433	1.00	41.90	8
ATOM	14139	OWO	WAT	W1637	-41.019	18.933	-26.682	1.00	44.81	8
ATOM	14140	OWO	WAT	W1638	23.114	20.749	-37.924	1.00	62.75	8
ATOM	14141	OWO	WAT	W1639	13.909	21.823	27.581	1.00	58.06	8
ATOM	14142	OWO	WAT	W1640	17.999	-10.593	-19.612	1.00	64.30	8
ATOM	14143	OWO	WAT	W1641	-29.748	-34.602	-3.550	1.00	76.92	8
ATOM	14144	OWO	WAT	W1642	17.619	4.843	21.277	1.00	66.25	8
ATOM	14145	OWO	WAT	W1643	1.645	-12.723	-30.753	1.00	61.05	8
ATOM	14146	OWO	WAT	W1644	14.388	-7.058	-31.736	1.00	69.27	8
ATOM	14147	OWO	WAT	W1645	-0.345	-14.526	-31.946	1.00	46.73	8
ATOM	14148	OWO	WAT	W1646	-8.332	28.576	-55.505	1.00	61.32	8
ATOM	14149	OWO	WAT	W1647	19.257	32.094	2.968	1.00	48.10	8
ATOM	14150	OWO	WAT	W1648	34.897	-4.147	-9.422	1.00	44.36	8
ATOM	14151	OWO	WAT	W1649	8.542	-8.097	19.076	1.00	63.73	8
ATOM	14152	OWO	WAT	W1650	7.894	15.024	20.911	1.00	49.59	8
ATOM	14153	OWO	WAT	W1651	-42.243	-4.170	-34.227	1.00	60.83	8
ATOM	14154	OWO	WAT	W1652	1.222	-23.495	-26.733	1.00	55.04	8
ATOM	14155	OWO	WAT	W1653	-39.417	-12.786	-6.216	1.00	65.68	8
ATOM	14156	OWO	WAT	W1654	25.577	-2.430	-27.279	1.00	61.60	8
ATOM	14157	OWO	WAT	W1655	-32.489	-16.650	-31.045	1.00	65.35	8
ATOM	14159	OWO	WAT	W1656	-2.135	0.718	-54.645	1.00	66.12	8
ATOM	14160	OWO	WAT	W1657	14.600	-0.231	21.129	1.00	60.74	8
ATOM	14161	OWO	WAT	W1658	-4.457	30.566	-58.001	1.00	60.06	8
ATOM	14162	OWO	WAT	W1659	-24.663	25.436	25.322	1.00	51.92	8
ATOM	14163	OWO	WAT	W1660	-30.895	3.943	17.979	1.00	68.32	8
ATOM	14164	OWO	WAT	W1661	13.456	-4.425	-46.299	1.00	64.41	8
ATOM	14165	OWO	WAT	W1662	13.680	-2.105	-44.086	1.00	51.92	8
ATOM	14166	OWO	WAT	W1663	2.430	41.834	-37.857	1.00	49.13	8
ATOM	14167	OWO	WAT	W1664	-25.688	22.980	24.428	1.00	52.31	8
ATOM	14168	OWO	WAT	W1665	-13.408	31.350	4.122	1.00	41.37	8
ATOM	14169	OWO	WAT	W1666	-35.176	11.924	-47.528	1.00	69.96	8
ATOM	14170	OWO	WAT	W1667	-42.300	8.351	-7.967	1.00	66.51	8
ATOM	14171	OWO	WAT	W1668	-9.421	1.291	-49.400	1.00	77.26	8
ATOM	14172	OWO	WAT	W1669	-37.045	-9.859	-44.389	1.00	60.39	8
ATOM	14173	OWO	WAT	W1670	-21.799	37.732	-34.135	1.00	75.22	8
ATOM	14174	OWO	WAT	W1671	-14.063	8.490	-52.331	1.00	61.21	8
ATOM	14175	OWO	WAT	W1672	15.586	37.500	-7.268	1.00	44.57	8
ATOM	14176	OWO	WAT	W1673	2.252	3.271	-58.224	1.00	52.82	8
ATOM	14177	OWO	WAT	W1674	35.234	17.637	5.901	1.00	52.54	8
ATOM	14178	OWO	WAT	W1675	-23.005	23.206	25.335	1.00	65.44	8
ATOM	14179	OWO	WAT	W1676	1.139	0.927	-56.891	1.00	55.55	8
ATOM	14180	OWO	WAT	W1677	-35.798	18.148	10.922	1.00	37.96	8
ATOM	14181	OWO	WAT	W1678	40.483	-3.465	4.749	1.00	55.32	8
ATOM	14182	OWO	WAT	W1679	-20.956	39.622	-12.487	1.00	63.20	8
ATOM	14183	OWO	WAT	W1680	-28.635	16.094	19.516	1.00	53.47	8
ATOM	14184	OWO	WAT	W1681	7.578	26.430	28.333	1.00	44.84	8
ATOM	14185	OWO	WAT	W1682	14.312	-12.825	9.223	1.00	65.36	8
ATOM	14186	OWO	WAT	W1683	2.250	-0.554	-12.943	1.00	74.01	8
ATOM	14187	OWO	WAT	W1684	5.301	-19.371	-3.416	1.00	35.93	8
ATOM	14188	OWO	WAT	W1685	-7.629	-12.020	-43.511	1.00	57.25	8
ATOM	14189	OWO	WAT	W1686	4.125	-21.659	-4.830	1.00	54.84	8
ATOM	14190	OWO	WAT	W1687	20.000	30.752	-35.304	1.00	59.19	8
ATOM	14191	OWO	WAT	W1688	26.048	33.114	13.581	1.00	41.21	8
ATOM	14192	OWO	WAT	W1689	-4.238	1.509	-57.689	1.00	63.61	8
ATOM	14193	OWO	WAT	W1690	28.076	24.645	-14.867	1.00	42.39	8
ATOM	14194	OWO	WAT	W1691	-44.918	1.105	-33.902	1.00	46.23	8
ATOM	14195	OWO	WAT	W1692	36.483	3.841	5.316	1.00	63.46	8
ATOM	14196	OWO	WAT	W1693	-22.992	35.413	-14.516	1.00	51.34	8
ATOM	14197	OWO	WAT	W1694	-2.583	41.992	-11.053	1.00	49.75	8
ATOM	14198	OWO	WAT	W1695	-36.277	7.919	-3.224	1.00	49.69	8
ATOM	14199	OWO	WAT	W1696	-3.191	16.551	-11.010	1.00	59.13	8
ATOM	14200	OWO	WAT	W1697	-8.438	-11.125	10.787	1.00	50.39	8
ATOM	14201	OWO	WAT	W1698	-29.533	-29.040	-0.550	1.00	70.74	8
ATOM	14202	OWO	WAT	W1699	-44.081	13.665	-37.921	1.00	55.90	8
ATOM	14203	OWO	WAT	W1700	12.547	-12.987	6.332	1.00	48.82	8
ATOM	14204	OWO	WAT	W1701	-34.928	-0.458	-12.467	1.00	53.99	8
ATOM	14205	OWO	WAT	W1702	30.447	23.090	-14.162	1.00	54.89	8
ATOM	14206	OWO	WAT	W1703	1.047	-18.357	11.041	1.00	44.68	8
ATOM	14207	OWO	WAT	W1704	-14.082	21.781	-49.851	1.00	49.34	8
ATOM	14208	OWO	WAT	W1705	-0.956	15.034	-6.583	1.00	46.18	8
ATOM	14209	OWO	WAT	W1706	22.464	26.133	-31.030	1.00	47.20	8
ATOM	14210	OWO	WAT	W1707	-42.461	16.483	9.292	1.00	44.43	8
ATOM	14211	OWO	WAT	W1708	-22.587	15.194	18.608	1.00	47.62	8
ATOM	14212	OWO	WAT	W1709	38.107	3.229	9.439	1.00	61.28	8
ATOM	14213	OWO	WAT	W1710	23.092	23.059	-32.278	1.00	57.42	8

181/188

ATOM	14214	OWO	WAT	W1711	-34.407	-11.742	-17.991	1.00	65.83	8
ATOM	14215	OWO	WAT	W1712	-8.661	41.345	-3.860	1.00	45.53	8
ATOM	14216	OWO	WAT	W1713	32.671	26.867	16.728	1.00	57.38	8
ATOM	14217	OWO	WAT	W1714	-6.678	35.831	13.489	1.00	64.39	8
ATOM	14218	OWO	WAT	W1715	-23.646	37.511	14.672	1.00	61.09	8
ATOM	14219	OWO	WAT	W1716	0.827	-0.265	-52.145	1.00	53.86	8
ATOM	14220	OWO	WAT	W1717	-25.957	24.210	6.325	1.00	10.60	8
ATOM	14221	OWO	WAT	W1718	-36.915	8.315	-6.910	1.00	24.37	8
ATOM	14222	OWO	WAT	W1719	-21.930	32.584	9.733	1.00	40.38	8
ATOM	14223	OWO	WAT	W1720	-33.837	-7.231	-30.663	1.00	43.71	8
ATOM	14224	OWO	WAT	W1721	-10.940	-21.936	-21.458	1.00	37.72	8
ATOM	14225	OWO	WAT	W1722	3.229	28.006	-45.677	1.00	38.93	8
ATOM	14226	OWO	WAT	W1723	-13.362	-23.141	-20.578	1.00	38.15	8
ATOM	14227	OWO	WAT	W1724	-35.422	-6.698	-26.084	1.00	44.27	8
ATOM	14228	OWO	WAT	W1725	-29.695	-22.240	-19.130	1.00	44.10	8
ATOM	14229	OWO	WAT	W1726	-16.025	-23.004	-19.798	1.00	39.23	8
ATOM	14230	OWO	WAT	W1727	-21.211	34.471	6.474	1.00	50.02	8
ATOM	14231	OWO	WAT	W1728	-23.670	30.994	9.999	1.00	45.69	8
ATOM	14232	OWO	WAT	W1729	12.563	37.129	21.860	1.00	33.03	8
ATOM	14233	OWO	WAT	W1730	-0.146	9.518	-13.229	1.00	53.80	8
ATOM	14234	OWO	WAT	W1731	-11.543	48.593	-24.136	1.00	50.85	8
ATOM	14235	OWO	WAT	W1732	21.535	12.081	-30.767	1.00	30.13	8
ATOM	14236	OWO	WAT	W1733	-9.378	45.366	-42.067	1.00	44.78	8
ATOM	14237	OWO	WAT	W1734	-31.127	-7.594	-30.942	1.00	55.30	8
ATOM	14238	OWO	WAT	W1735	-1.169	34.673	-48.764	1.00	45.60	8
ATOM	14239	OWO	WAT	W1736	-36.306	-10.774	-41.857	1.00	65.06	8
ATOM	14240	OWO	WAT	W1737	-1.849	41.668	-39.187	1.00	53.53	8
ATOM	14241	OWO	WAT	W1738	-22.810	-22.313	-41.158	1.00	65.78	8
ATOM	14242	OWO	WAT	W1739	30.918	-1.182	13.530	1.00	60.46	8
ATOM	14243	OWO	WAT	W1740	-9.535	18.063	38.151	1.00	45.28	8
ATOM	14244	OWO	WAT	W1741	-8.115	35.903	-45.010	1.00	57.77	8
ATOM	14245	OWO	WAT	W1742	1.588	17.093	-59.629	1.00	59.92	8
ATOM	14246	OWO	WAT	W1743	5.838	-1.126	24.135	1.00	45.93	8
ATOM	14247	OWO	WAT	W1744	-24.194	-29.962	-5.791	1.00	45.39	8
ATOM	14248	OWO	WAT	W1745	-31.748	18.985	-19.332	1.00	43.59	8
ATOM	14249	OWO	WAT	W1746	-6.186	-1.423	38.669	1.00	39.56	8
ATOM	14250	OWO	WAT	W1747	-1.498	9.519	-2.477	1.00	48.71	8
ATOM	14251	OWO	WAT	W1748	19.319	-14.804	-10.471	1.00	53.07	8
ATOM	14252	OWO	WAT	W1749	-26.713	-9.833	7.670	1.00	53.89	8
ATOM	14253	OWO	WAT	W1750	0.976	28.617	-43.645	1.00	39.79	8
ATOM	14254	OWO	WAT	W1751	-23.499	22.257	22.990	1.00	50.31	8
ATOM	14255	OWO	WAT	W1752	-2.630	13.835	-2.737	1.00	48.54	8
ATOM	14256	OWO	WAT	W1753	-1.825	-14.391	11.323	1.00	44.35	8
ATOM	14257	OWO	WAT	W1754	1.610	4.170	-9.146	1.00	48.12	8
ATOM	14258	OWO	WAT	W1755	4.870	-18.495	-0.691	1.00	52.10	8
ATOM	14259	OWO	WAT	W1756	-19.146	-3.135	22.287	1.00	48.79	8
ATOM	14260	OWO	WAT	W1757	-25.967	-21.561	-28.233	1.00	59.07	8
ATOM	14261	OWO	WAT	W1758	-9.836	-10.938	28.657	1.00	57.59	8
ATOM	14262	OWO	WAT	W1759	-8.454	42.247	-19.345	1.00	47.00	8
ATOM	14263	OWO	WAT	W1760	-36.899	-11.839	-17.105	1.00	47.83	8
ATOM	14264	OWO	WAT	W1761	-33.497	-13.229	-20.326	1.00	37.19	8
ATOM	14265	OWO	WAT	W1762	17.415	0.506	-36.013	1.00	68.02	8
ATOM	14266	OWO	WAT	W1763	31.597	-5.114	9.670	1.00	49.31	8
ATOM	14267	OWO	WAT	W1764	38.944	7.663	17.549	1.00	57.62	8
ATOM	14268	OWO	WAT	W1765	5.021	19.475	26.741	1.00	63.44	8
ATOM	14269	OWO	WAT	W1766	-14.742	51.234	-35.204	1.00	55.85	8
ATOM	14270	OWO	WAT	W1767	30.054	16.206	-20.046	1.00	55.24	8
ATOM	14271	OWO	WAT	W1768	-43.344	16.479	-26.431	1.00	58.84	8
ATOM	14272	OWO	WAT	W1769	-7.674	-9.725	33.466	1.00	59.11	8
ATOM	14273	OWO	WAT	W1770	28.229	22.783	-9.368	1.00	39.54	8
ATOM	14274	OWO	WAT	W1771	-9.588	17.723	-7.321	1.00	56.62	8
ATOM	14275	OWO	WAT	W1772	-25.501	17.844	-38.107	1.00	61.58	8
ATOM	14276	OWO	WAT	W1773	40.972	5.064	-17.038	1.00	65.34	8
ATOM	14277	OWO	WAT	W1774	-2.033	35.476	-50.936	1.00	54.83	8
ATOM	14278	OWO	WAT	W1775	-23.544	12.827	26.605	1.00	75.90	8
ATOM	14279	OWO	WAT	W1776	-36.684	-8.716	-27.027	1.00	68.20	8
ATOM	14280	OWO	WAT	W1777	-19.657	13.842	19.831	1.00	53.01	8
ATOM	14281	OWO	WAT	W1778	8.494	0.060	27.651	1.00	53.26	8
ATOM	14282	OWO	WAT	W1779	-9.656	32.229	-50.895	1.00	72.54	8
ATOM	14283	OWO	WAT	W1780	0.910	25.609	24.745	1.00	52.48	8
ATOM	14284	OWO	WAT	W1781	38.052	13.815	-17.186	1.00	63.54	8
ATOM	14285	OWO	WAT	W1782	-15.541	6.811	-41.879	1.00	48.63	8
ATOM	14286	OWO	WAT	W1783	-6.210	5.749	37.402	1.00	58.49	8
ATOM	14287	OWO	WAT	W1784	-13.528	39.320	13.645	1.00	56.32	8
ATOM	14288	OWO	WAT	W1785	-6.470	8.388	-6.209	1.00	49.86	8
ATOM	14289	OWO	WAT	W1786	-19.695	15.201	37.871	1.00	44.61	8
ATOM	14290	OWO	WAT	W1787	-25.000	-11.595	14.973	1.00	66.07	8
ATOM	14291	OWO	WAT	W1788	-29.414	-21.836	-21.550	1.00	57.02	8
ATOM	14292	OWO	WAT	W1789	-31.774	25.557	-42.143	1.00	48.15	8

182/188

ATOM	14293	OWO	WAT	W1790	36.648	9.899	7.890	1.00	54.02	8
ATOM	14294	OWO	WAT	W1791	-9.660	48.469	-25.894	1.00	58.35	8
ATOM	14295	OWO	WAT	W1792	-12.851	10.368	41.054	1.00	76.19	8
ATOM	14296	OWO	WAT	W1793	37.044	-10.095	-28.549	1.00	63.35	8
ATOM	14297	OWO	WAT	W1794	0.133	39.789	-17.641	1.00	50.96	8
ATOM	14298	OWO	WAT	W1795	-10.438	-20.237	-6.155	1.00	70.47	8
ATOM	14299	OWO	WAT	W1796	1.062	-20.217	-5.097	1.00	53.26	8
ATOM	14300	OWO	WAT	W1797	-27.252	-25.135	-27.438	1.00	75.38	8
ATOM	14301	OWO	WAT	W1798	5.176	-8.976	32.260	1.00	65.83	8
ATOM	14302	OWO	WAT	W1799	-11.127	36.045	23.016	1.00	47.47	8
ATOM	14303	OWO	WAT	W1800	-28.491	-18.098	-2.560	1.00	55.32	8
ATOM	14304	OWO	WAT	W1801	-3.427	-16.240	12.728	1.00	49.84	8
ATOM	14305	OWO	WAT	W1802	29.064	7.366	21.631	1.00	78.73	8
ATOM	14306	OWO	WAT	W1803	24.348	14.238	-37.424	1.00	53.50	8
ATOM	14307	OWO	WAT	W1804	-25.144	11.690	17.942	1.00	51.80	8
ATOM	14308	OWO	WAT	W1805	-32.130	-17.062	-35.738	1.00	60.18	8
ATOM	14309	OWO	WAT	W1806	29.915	8.610	-23.744	1.00	48.57	8
ATOM	14310	OWO	WAT	W1807	-8.278	12.018	34.965	1.00	58.07	8
ATOM	14311	OWO	WAT	W1808	-18.409	-3.021	32.069	1.00	67.20	8
ATOM	14312	OWO	WAT	W1809	18.518	-6.171	-21.298	1.00	49.95	8
ATOM	14313	OWO	WAT	W1810	8.309	28.898	-48.870	1.00	69.71	8
ATOM	14314	OWO	WAT	W1811	32.218	24.550	-7.097	1.00	67.00	8
ATOM	14315	OWO	WAT	W1812	-10.028	35.002	25.398	1.00	58.87	8
ATOM	14316	OWO	WAT	W1813	-4.083	32.968	15.409	1.00	61.58	8
ATOM	14317	OWO	WAT	W1814	5.298	6.909	29.952	1.00	48.18	8
ATOM	14318	OWO	WAT	W1815	-4.227	-14.652	26.849	1.00	53.49	8
ATOM	14319	OWO	WAT	W1816	-9.901	29.012	33.482	1.00	72.55	8
ATOM	14320	OWO	WAT	W1817	35.383	3.665	-3.368	1.00	63.58	8
ATOM	14321	OWO	WAT	W1818	32.120	2.904	14.281	1.00	56.84	8
ATOM	14322	OWO	WAT	W1819	25.945	22.770	-32.927	1.00	56.54	8
ATOM	14323	OWO	WAT	W1820	16.177	31.964	2.877	1.00	55.27	8
ATOM	14324	OWO	WAT	W1821	-7.800	47.880	-37.150	1.00	67.69	8
ATOM	14325	OWO	WAT	W1822	-23.918	31.473	-29.423	1.00	66.43	8
ATOM	14326	OWO	WAT	W1823	21.008	34.606	-10.638	1.00	52.61	8
ATOM	14327	OWO	WAT	W1824	-19.147	44.253	-17.680	1.00	55.41	8
ATOM	14328	OWO	WAT	W1825	38.627	15.297	-14.941	1.00	78.44	8
ATOM	14329	OWO	WAT	W1826	-40.047	2.070	-21.600	1.00	53.52	8
ATOM	14330	OWO	WAT	W1827	39.195	15.122	7.053	1.00	56.40	8
ATOM	14331	OWO	WAT	W1828	0.477	21.690	25.831	1.00	57.56	8
ATOM	14332	OWO	WAT	W1829	-21.437	-28.095	-27.131	1.00	67.24	8
ATOM	14333	OWO	WAT	W1830	-24.957	19.413	25.471	1.00	61.39	8
ATOM	14334	OWO	WAT	W1831	-3.962	32.618	22.925	1.00	72.48	8
ATOM	14335	OWO	WAT	W1832	-27.995	27.050	5.293	1.00	68.39	8
ATOM	14336	OWO	WAT	W1833	16.538	32.527	-39.483	1.00	46.03	8
ATOM	14337	OWO	WAT	W1834	15.101	1.347	-33.305	1.00	62.28	8
ATOM	14338	OWO	WAT	W1835	-23.871	29.436	27.262	1.00	62.16	8
ATOM	14339	OWO	WAT	W1836	24.065	-14.062	-10.079	1.00	57.80	8
ATOM	14340	OWO	WAT	W1837	-37.751	-5.831	-6.342	1.00	51.15	8
ATOM	14341	OWO	WAT	W1838	-9.428	35.329	-50.723	1.00	59.94	8
ATOM	14342	OWO	WAT	W1839	18.195	-12.137	-14.241	1.00	39.06	8
ATOM	14343	OWO	WAT	W1840	24.148	-22.213	6.072	1.00	56.19	8
ATOM	14344	OWO	WAT	W1841	6.068	-11.281	34.299	1.00	56.22	8
ATOM	14345	OWO	WAT	W1842	-37.404	25.606	0.431	1.00	58.17	8
ATOM	14346	OWO	WAT	W1843	-38.604	-3.490	-7.016	1.00	56.25	8
ATOM	14347	OWO	WAT	W1844	-25.747	33.372	-29.659	1.00	60.20	8
ATOM	14348	OWO	WAT	W1845	-4.758	16.102	34.826	1.00	61.08	8
ATOM	14349	OWO	WAT	W1846	-37.507	20.747	-12.114	1.00	58.53	8
ATOM	14350	OWO	WAT	W1847	-22.974	-28.665	-3.912	1.00	47.14	8
ATOM	14351	OWO	WAT	W1848	-15.061	-32.905	-34.312	1.00	61.05	8
ATOM	14352	OWO	WAT	W1849	-21.933	8.064	25.626	1.00	84.34	8
ATOM	14353	OWO	WAT	W1850	11.487	-13.053	9.107	1.00	81.67	8
ATOM	14354	OWO	WAT	W1851	-28.315	-5.411	17.931	1.00	62.82	8
ATOM	14355	OWO	WAT	W1852	39.432	-11.125	-28.699	1.00	86.85	8
ATOM	14356	OWO	WAT	W1853	1.671	39.026	-13.086	1.00	70.44	8
ATOM	14357	OWO	WAT	W1854	15.474	-15.133	9.091	1.00	67.33	8
ATOM	14358	OWO	WAT	W1855	-9.280	-11.713	-48.159	1.00	68.89	8
ATOM	14359	OWO	WAT	W1856	-33.222	-3.749	-44.176	1.00	65.67	8
ATOM	14360	OWO	WAT	W1857	16.033	-15.973	-14.160	1.00	60.40	8
ATOM	14361	OWO	WAT	W1858	-10.728	12.103	40.805	1.00	88.22	8
ATOM	14362	OWO	WAT	W1859	26.935	-22.059	1.665	1.00	54.70	8
ATOM	14363	OWO	WAT	W1860	-20.599	16.211	-48.963	1.00	68.74	8
ATOM	14364	OWO	WAT	W1861	12.893	35.603	-35.135	1.00	65.53	8
ATOM	14365	OWO	WAT	W1862	-14.083	10.290	-54.756	1.00	60.82	8
ATOM	14366	OWO	WAT	W1863	-23.543	21.201	-38.921	1.00	60.57	8
ATOM	14367	OWO	WAT	W1864	18.100	44.081	-21.669	1.00	45.83	8
ATOM	14368	OWO	WAT	W1865	-26.546	28.857	-26.918	1.00	56.36	8
ATOM	14369	OWO	WAT	W1866	12.212	38.147	-35.141	1.00	46.87	8
ATOM	14370	OWO	WAT	W1867	39.614	7.994	12.633	1.00	54.47	8
ATOM	14371	OWO	WAT	W1868	-15.252	41.367	13.350	1.00	62.34	8

183/188

ATOM	14372	OWO	WAT	W1869	17.545	36.681	1.816	1.00	69.23	8
ATOM	14373	OWO	WAT	W1870	38.406	8.928	1.628	1.00	63.49	8
ATOM	14374	OWO	WAT	W1871	22.956	26.118	5.739	1.00	61.56	8
ATOM	14375	OWO	WAT	W1872	-28.062	28.078	-28.108	1.00	47.04	8
ATOM	14376	OWO	WAT	W1873	17.792	32.079	-23.503	1.00	64.56	8
ATOM	14377	OWO	WAT	W1874	-0.826	6.722	-3.465	1.00	53.90	8
ATOM	14378	OWO	WAT	W1875	-23.470	17.579	-42.579	1.00	72.73	8
ATOM	14379	OWO	WAT	W1876	-28.819	2.772	-47.133	1.00	56.29	8
ATOM	14380	OWO	WAT	W1877	-22.166	36.082	-40.690	1.00	59.96	8
ATOM	14381	OWO	WAT	W1878	8.087	36.247	-35.630	1.00	47.32	8
ATOM	14382	OWO	WAT	W1879	12.320	40.537	-34.103	1.00	54.18	8
ATOM	14383	OWO	WAT	W1880	-37.754	14.031	-46.093	1.00	50.44	8
ATOM	14384	OWO	WAT	W1881	-25.409	-9.579	13.468	1.00	83.40	8
ATOM	14385	OWO	WAT	W1882	35.587	9.317	1.026	1.00	69.20	8
ATOM	14386	OWO	WAT	W1883	-38.111	20.008	-41.072	1.00	79.80	8
ATOM	14387	OWO	WAT	W1884	-20.930	-0.918	-46.966	1.00	50.38	8
ATOM	14388	OWO	WAT	W1885	-33.491	20.054	-17.715	1.00	58.78	8
ATOM	14389	OWO	WAT	W1886	-22.868	20.808	-41.463	1.00	75.74	8
ATOM	14390	OWO	WAT	W1887	-18.859	-25.529	-5.030	1.00	63.35	8
ATOM	14391	OWO	WAT	W1888	-27.853	-17.175	-37.718	1.00	64.21	8
ATOM	14392	OWO	WAT	W1889	24.288	32.758	-7.984	1.00	45.12	8
ATOM	14393	OWO	WAT	W1890	-5.990	-17.919	-38.057	1.00	78.34	8
ATOM	14394	OWO	WAT	W1891	-6.833	-12.960	-48.588	1.00	73.58	8
ATOM	14395	OWO	WAT	W1892	-31.285	7.335	-47.122	1.00	58.98	8
ATOM	14396	OWO	WAT	W1893	-33.424	-16.449	-16.179	1.00	48.59	8
ATOM	14397	OWO	WAT	W1894	19.920	29.760	26.269	1.00	45.30	8
ATOM	14398	OWO	WAT	W1895	-17.131	45.791	-36.666	1.00	39.65	8
ATOM	14399	OWO	WAT	W1896	37.315	8.782	-18.927	1.00	69.65	8
ATOM	14400	OWO	WAT	W1897	24.558	27.674	3.552	1.00	73.88	8
ATOM	14401	OWO	WAT	W1898	-29.874	-14.016	-3.940	1.00	51.32	8
ATOM	14402	OWO	WAT	W1899	29.376	23.103	2.589	1.00	82.18	8
ATOM	14403	OWO	WAT	W1900	-1.358	-12.607	30.794	1.00	72.43	8
ATOM	14404	OWO	WAT	W1901	11.408	1.540	-34.580	1.00	76.13	8
ATOM	14405	OWO	WAT	W1902	28.986	22.990	5.181	1.00	56.32	8
ATOM	14406	OWO	WAT	W1903	3.968	-9.198	-35.095	1.00	56.63	8
ATOM	14408	OWO	WAT	W1904	-10.588	-21.432	-38.854	1.00	63.05	8
ATOM	14409	OWO	WAT	W1905	-29.833	29.752	-20.479	1.00	69.80	8
ATOM	14410	OWO	WAT	W1906	23.617	-8.367	-19.618	1.00	71.31	8
ATOM	14411	OWO	WAT	W1907	-5.980	42.795	-10.466	1.00	54.14	8
ATOM	14412	OWO	WAT	W1908	-0.966	36.041	8.180	1.00	67.64	8
ATOM	14413	OWO	WAT	W1909	-3.623	44.160	-12.320	1.00	64.05	8
ATOM	14414	OWO	WAT	W1910	24.799	24.891	-21.885	1.00	64.22	8
ATOM	14415	OWO	WAT	W1911	20.367	39.523	-15.600	1.00	64.69	8
ATOM	14418	OWO	WAT	W1912	10.191	24.734	26.828	1.00	61.68	8
ATOM	14420	OWO	WAT	W1913	5.573	-13.041	-33.264	1.00	62.85	8
ATOM	14421	OWO	WAT	W1914	-26.707	15.936	28.137	1.00	63.87	8
ATOM	14422	OWO	WAT	W1915	-28.245	29.686	-33.087	1.00	63.79	8
ATOM	14423	OWO	WAT	W1916	6.535	38.067	-2.409	1.00	32.00	8
ATOM	14424	OWO	WAT	W1917	30.853	24.916	-2.409	1.00	55.00	8
ATOM	14425	OWO	WAT	W1918	25.732	29.761	22.886	1.00	56.00	8
ATOM	14426	OWO	WAT	W1919	-32.754	-8.305	-3.614	1.00	59.00	8
ATOM	14427	OWO	WAT	W1920	3.896	-13.842	-31.318	1.00	59.00	8
ATOM	14428	OWO	WAT	W1921	-4.021	4.845	37.340	1.00	60.00	8
ATOM	14429	OWO	WAT	W1922	-12.536	-29.069	-33.727	1.00	60.00	8
ATOM	14430	OWO	WAT	W1923	-29.502	31.146	-23.488	1.00	60.00	8
ATOM	14431	OWO	WAT	W1924	29.596	-6.921	-19.875	1.00	60.00	8
ATOM	14432	OWO	WAT	W1925	24.019	-16.611	7.829	1.00	61.00	8
ATOM	14433	OWO	WAT	W1926	-36.618	24.224	13.250	1.00	61.00	8
ATOM	14434	OWO	WAT	W1927	20.736	-2.768	16.261	1.00	61.00	8

Figure 2: Sequence alignment for Chorismate Synthase from pathogen bacteria, fungi, plants and apicomplexan parasites.

	1	5
<i>S. pneumoniae</i>	.....	.....
<i>E. faecalis</i>	.....	.....
<i>S. aureus</i>	.....	.....
<i>B. subtilis</i>	.....	.....
<i>M. tuberculosis</i>	.....	.....
<i>E. coli</i>	.....	.....
<i>S. typhi</i>	.....	.....
<i>Y. pestis</i>	.....	.....
<i>H. influenzae</i>	.....	.....
<i>P. multocida</i>	.....	.....
<i>N. gonorrhoeae</i>	.....	.....
<i>N. meningitidis</i>	.....	.....
<i>P. aeruginosa</i>	.....	.....
<i>H. pylori</i>	.....	.....
<i>N. crassa</i>	.....	.....
<i>A. thaliana</i>	MASSSLTSKS ILGSTKLGSS SLPSELRRLS SPAVQISLRT QTRKNFQIC	
<i>C. difficile</i>	.....	.....
<i>T. gondii</i>	.....	.....
<i>P. falciparum</i>	.....	.....
Consensus	.....	.....
	51	10
<i>S. pneumoniae</i>	.....MR YLTAGESHGP RLTAIEGIP AGLPLTAEDI NEDLRRROG	
<i>E. faecalis</i>	.....MR FITAGESHGP ELTAIEGLP AGLPLSSEEI NRELARROG	
<i>S. aureus</i>	.....MR YLTSGESHGP QLTVIVEGVP ANLEVKVEDI NKEMFKROG	
<i>B. subtilis</i>	.....MR YLTAGESHGP QLTFTIEGVP AGLYTEEDI NFELARROG	
<i>M. tuberculosis</i>	.....MLR WITAGESHGR ALVAVVEGMV AGVHVTSADI ADQLARRRI	
<i>E. coli</i>	AGNTIGQLFR VTTFGESHGL ALGCIVDGVP PGIPLTEADL QHDLDRRE	
<i>S. typhi</i>	AGNTIGQLFR VTTFGESHGL AVGGIVDGVP PGIPLTEADL QHDLDRRE	
<i>Y. pestis</i>	AGNSIGQFFR VTTFGESHGI ALGCIVDGVP PGIPITEADI QDLDRRE	
<i>H. influenzae</i>	AGNTIGQLFR VTTFGESHGI ALGCIVDGVP PNLELSEKDI QPDLDRRK	
<i>P. multocida</i>	.....TFGESHGI ALGCIVDGVP PGLSLSEADI QPDLDRRK	
<i>N. gonorrhoeae</i>	AGNTFGQIFT VTTFGESHGA GLGCIIDGCP PGLLESEADI QPDLDRRK	
<i>N. meningitidis</i>	AGNTFGQLFT VTTFGESHGA GLGCIIDGCP PGLLESEADI QPDLDRRK	
<i>P. aeruginosa</i>	SGNTYGLFT VTTAGESHGP ALVAIVDGCP PGLLESEADI QPDLDRRK	
<i>H. pylori</i>	.MNTLGRFLR LTTFGESHGD VIGGVLDGMP SGIKIDYALL ENEMKRROG	
<i>N. crassa</i>	.MSTFGHYFR VTTYGESCHK SVGCIVDGVP PGMELTEDDI QPQMTARR	
<i>A. thaliana</i>	TGSSYGTHFR VSTFGESHGG GVGCIIDGCP PRIPLTEADI QPDLDRRK	
<i>C. difficile</i>	MSGIWCNNLK VSIFGESHGN AIGINIDGLP SGIELDLDKI DKEMKRRAI	
<i>T. gondii</i>	.MSSYGAAIR INTFGESHGS AVGCIVDGLP PRLPLSVEDV QPOLNRRI	
<i>P. falciparum</i>	.MSTYGTLLK VTSYGESHGK AIGCIVDGFL SNIEINFDLI QKQLDRRI	
Consensus	.....g....r vttfGESHG. algc!!#G.p pgl.l...di #.\$.RR.f	
	101	15
<i>S. pneumoniae</i>	YGRGGRMKIE NDQVFTSGV RHGKTTGAPI TMDVINKDHO KWLDMISAI	
<i>E. faecalis</i>	YGRGGRMKIE KDQVRITSGI RHGKTLGSPV TLIVENKDWK NWTSMVSVI	
<i>S. aureus</i>	YGRGRRMOIE KDTVEIVSGV RNYTLGSPV TMVVTNDDFT HWRKIMGRI	
<i>B. subtilis</i>	HGRGRRMOIE KDOAKIMSGV RHARTLGSPV ALVVENNDWK HWTRKMGAI	
<i>M. tuberculosis</i>	YGRGARMTFE RDAVTVLSGI RHGSTLGGPI AIEIGNTEWP KWETVMAAI	
<i>E. coli</i>	TSRYTTORRE PDQVKILSGV FEGVTTGTST GLLIENTD..	
<i>S. typhi</i>	TSRYTTORRE PDQVKILSGV FDGVTTGTST GLLIENTD..	
<i>Y. pestis</i>	TSRYTTORRE LDQVRILSGV FEGVTTGTST GLMIENTD..	
<i>H. influenzae</i>	TSRYTTPRRE DDEVQILSGV FEGKTTGTST GMIKNKD..	
<i>P. multocida</i>	TSRYTTPRRE DDEVQILSGV FEGKTTGTST GMIKNAD..	
<i>N. gonorrhoeae</i>	TSRHVTORRE ADQVEILSGV FEGKTTGTPI ALLIRNTD..	
<i>N. meningitidis</i>	TSRHVTORRE ADQVEILSGV FEGKTTGTPI ALLIRNTD..	
<i>P. aeruginosa</i>	TSRHVTORRE ADEVEILSGV FEGKTTGTPI GLLIRNTD..	
<i>H. pylori</i>	RNVFITPRKE DDKVEITSGV FEDFSTGTPI GFLIHNOR..	
<i>N. crassa</i>	QSAITTPRDE KDRVIIQSGT EFGVTLGTPI GMLVMNED..	
<i>A. thaliana</i>	QSRITTPRKE TDTCRISSGV SEGMTTGTPI HVFVPTND..	
<i>C. difficile</i>	KNSISTSRNE SDIPEILSGV FNGRTTGTPL CAIIRNSD..	
<i>T. gondii</i>	QGPLSTORRE KDRVNLSGV EDGYTLGTPL AMLVMNED..	
<i>P. falciparum</i>	QSKLTSNRNE KOKLVILSGF DENKTLGTPI TFLIYNED..	

185/188

Consensus .sr..t.r.E .D.v.!!SGv .eg.TtGtpi!.N.#..

	151		20
<i>S. pneumoniae</i>	I..EDRLKSK RK..ITHPRP	GHADLVGGIK YRFDDLRLNSL	ERSSARETT
<i>E. faecalis</i>	V..PEKQKKI RR..VSKPRP	GHADLVGGMK YQHDDLRLNVL	ERSSARETT
<i>S. aureus</i>	ISDEERENMK RT..ITKPRP	GHADLLGGMK YNHRDLRLNVL	ERSSARETT
<i>B. subtilis</i>	ITEDEEKEMK RQ..ISRPRP	GHADLNGAIK YNHRDMRLNVL	ERSSARETT
<i>M. tuberculosis</i>	VDPALADVA RNAPLTRPRP	GHADYAGMLK YGFDDARFVL	ERASARETT
<i>E. coli</i>	...QRSQDYS A..IKDVFRP	GHADYTYEQK Y.GLRDYRGG	GRSSARETT
<i>S. typhi</i>	...QRSQDYS A..IKDVFRP	GHADYTYEQK Y.GLRDYRGG	GRSSARETT
<i>Y. pestis</i>	...QRSQDYS A..IKDVFRP	GHADYTYEQK Y.GVRDYRGG	GRSSARETT
<i>H. influenzae</i>	...QRSQDYG D..IKDRFRP	GHADFTYQOK Y.GIRDYRGG	GRSSARETT
<i>P. multocida</i>	...QRSQDYG D..IKDRFRP	GHADFTYQOK Y.GIRDYRGG	GRSSARETT
<i>N. gonorrhoeae</i>	...QRSEDYG D..IATAFRP	GHADYTYWHK Y.GTRDYRGG	GRSSARETT
<i>N. meningitidis</i>	...QRSKDYG N..IATSFRP	GHADYTYWHK Y.GTRDYRGG	GRSSARETT
<i>P. aeruginosa</i>	...QKSKDYS A..IKDLFRP	GHADYTYHHK Y.GVRDYRGG	GRSSARETT
<i>H. pylori</i>	...ARSKDYD N..IKNLFRP	SHADFTYFHK Y.GIRDYRGG	GRSSARETT
<i>N. crassa</i>	...QPKDYG NKTMDIYPRP	SHADWTYLEK Y.GVKASSGG	GRSSARETT
<i>A. thaliana</i>	...QRGLDYS E..MSVAYRP	SHADATYDMK Y.GVRSVQGG	GRSSARETT
<i>C. difficile</i>	...TRSKDYG E..LKNLMRP	GHADFTGNVR YSGFNDYRGG	GHFSGRIT
<i>T. gondii</i>	...RRPQEHY A..LATVPRP	GHGDFTYHAK Y.HIHAKEGG	GRSSARETT
<i>P. falciparum</i>	...IKKEDYN S..FINIPRP	GHGDYTYFMK Y.HVKNKSGS	SRFSGRET
Consensus	....r..dy. ....RP	gHaD.ty..K Y.g.....gg	qRsSaRET

	201		2.
<i>S. pneumoniae</i>	RVAVGAVAKR LLAE.LDMEI	ANHVVVFEGGK EIDVPEN...	
<i>E. faecalis</i>	RVAIGAVAKK LLAE.LDIQV	AGHVAVLGGI EATIPEN...	
<i>S. aureus</i>	RVAVGALCKV LLEQ.LDIEI	YSRVVEIGGI KDK..DF...	
<i>B. subtilis</i>	RVAAGAVAKK ILSE.LGIKV	AGHVLOIGAV KAEKTGY...	
<i>M. tuberculosis</i>	RVAAGTVARA FLROALGVEV	LSHVVISIGAS APYEGPP...	
<i>E. coli</i>	RVAAGAIACK YLAKEFGIEI	RGCLTOMGDI PL.....	
<i>S. typhi</i>	RVAAGAIACK YLAKEFGIEI	RGCLTOMGDI PL.....	
<i>Y. pestis</i>	RVAAGAIACK YLAQKFGVOV	RGYLAQMGDV SC.....	
<i>H. influenzae</i>	RVAAGAIACK YLREHFGIEV	RGFLSQIGNI KIAPOKV...	
<i>P. multocida</i>	RVAAGAIACK YLREHFGVEV	RGFLAQIGDV AIAPOVI...	
<i>N. gonorrhoeae</i>	RVAAGAVAKK WLKEKFGTEI	TAYVTOVGKEK KI.....	
<i>N. meningitidis</i>	RVAAGAVAKK WLKEKFGTEI	TAYVTOVGKEK EI.....	
<i>P. aeruginosa</i>	RVAAGAIACK YLAG.LGIQV	RGYMSOLGPI EI.....	
<i>H. pylori</i>	RVAAGAFAMK LLRE.IGIVC	ESGIIEIGGI KA.....	
<i>N. crassa</i>	RVAAGAIACK YLKPRYGVET	VAFVSSVGSE HLFPPTAERP	SPSTNPEF
<i>A. thaliana</i>	RVAPGALAKK ILKQFAGTEI	LAYVSQVHHV VL.....	PEE
<i>C. difficile</i>	LVFCGAICKQ ILSQK.GIEI	GAHIKKIKNI EDMSEFY...	
<i>T. gondii</i>	RVAAGAVVEK WLGMYGTSE	TAWVCQVGDV SVPRSLRRKW	E.ROPPTR
<i>P. falciparum</i>	RVAAGACIEQ WLYKSYNCSE	VSYVHSGVNI KIPEQVSKEL	ENKNPPSR
Consensus	RVAAGA.akk .L....g.ei	...v.q.g..	

	251		3
<i>S. pneumoniae</i>	.LTVAEIKOR AAQSEVS...		
<i>E. faecalis</i>	.LTIREIQER SEQSAVR...		
<i>S. aureus</i>	.YDSETFKAN LDRNDVR...		
<i>B. subtilis</i>	.TSIEDLQRV TEESPVR...		
<i>M. tuberculosis</i>	.PRAEDLPA. IDASPVR...		
<i>E. coli</i>	..DIKWSQV EQN.PFF...		
<i>S. typhi</i>	..EIKDWRQV ELN.PFF...		
<i>Y. pestis</i>	..DLLDWDLV EQN.PFF...		
<i>H. influenzae</i>	..GQIDWEKV NSN.PFF...		
<i>P. multocida</i>	..EQIDWQV NSN.PFF...		
<i>N. gonorrhoeae</i>	..RFEGSEHI SQN.PFF...		
<i>N. meningitidis</i>	..RFEGCEHI SQN.PFF...		
<i>P. aeruginosa</i>	..PFRSWDSV EQN.AFF...		
<i>H. pylori</i>	..KNYDFNHA LKS.EIF...		
<i>N. crassa</i>	LVNSITRETV DSFLPVR...		
<i>A. thaliana</i>	DHENLTLEQI ENNI.VR...		
<i>C. difficile</i>	VNISKQQLSN LQTLPL...		
<i>T. gondii</i>	VDRLGVVRVS PDGTTFLDAN	NRLYDERGEE LVEEEDKARR	RLIFGVDN
<i>P. falciparum</i>	VDSYGTVRYN EKEKIFMDCF	NRIYDMNASM LKTDEYNKNT	LTIPSIDN
Consensus	.....	

	301		3
<i>S. pneumoniae</i>	.....		IVNQE

E. faecalis	.....	VLDPSV
S. aureus	.....	VIDDGI
B. subtilis	.....	CYDEEA
M. tuberculosis	.....	AYDKAA
E. coli	.....	CPDPDK
S. typhi	.....	CPDADK
Y. pestis	.....	CPDASK
H. influenzae	.....	CPDESA
P. multocida	.....	CPDPFA
N. gonorrhoeae	.....	AANQSQ
N. meningitidis	.....	AANHQS
P. aeruginosa	.....	SPDPDK
H. pylori	.....	ALDEEQ
N. crassa	.....	CPDAEA
A. thaliana	.....	CPNPEY
C. difficile	.....	LLDLSK
T. gondii	.....	TPGETVI ETRCPCPT
P. falciparum	INVKTNECNI NOVDNNHENNY INDKDNTFNN SEKSDEWIYL QTRCPHPYT	
Consensus		..cpd..

	351	40
<i>S. pneumoniae</i>	QEIKEYIDQI KRDGDTIGGV VETVVGGV..	....PVGLGS YVQWDRKLD
<i>E. faecalis</i>	EKMKEIIDQT KKNGDTIGGV VEVLVGGV..	....PAGLGS YVQWDRKLD
<i>S. aureus</i>	QAMRKIDIEA KTDGDSIGGV VOVVVNM..	....PVGVS YVHYDRKLD
<i>B. subtilis</i>	KKMAAIDEA KANGDSIGGI VEVIVEGM..	....PVGVS YVHYDRKLD
<i>M. tuberculosis</i>	ADMIAQIEAA KKDGDTLGGV VEAVALGL..	....PVGLGS FTSGDHRLD
<i>E. coli</i>	DALDELMRAL KKEGDSIGAK VTVVASGV..	....PAGLGE PVF..DRLD
<i>S. typhi</i>	DALDELMRAL KKEGDSIGAK VTVMASGV..	....PAGLGE PVF..DRLD
<i>Y. pestis</i>	EPLDALMREL KKAGDSIGAK ITVVAENV..	....PVGLGE PVF..DRLD
<i>H. influenzae</i>	EKFDELIREL KKEGDSIGAK LTVIAENV..	....PVGLGE PVF..DRLD
<i>P. multocida</i>	EKFDELIRQL KKEGDSIGAK LTVIAENV..	....PVGLGE PVF..DRLD
<i>N. gonorrhoeae</i>	AELHYMDGV RKSLSVGAK LHIEAENV..	....PVGLGE PVF..DRLD
<i>N. meningitidis</i>	AELNYMDSV RKSLSVGAK LHIEAENV..	....PVGLGE PVF..DRLD
<i>P. aeruginosa</i>	PELEAYMDQL RRDQDSVGAK ITVVAECV..	....PFGLGE PIF..DRLD
<i>H. pylori</i>	EAQKTAIQNA IKNHDSIGGV ALIRASIKT	NOKLPFGLGO GLY..AKLE
<i>N. crassa</i>	KRMEDLITKF RDNHDSIGGT VTCVIRNV..	....PSGLGE PAF..DKLE
<i>A. thaliana</i>	EKMIAAIDAV RTKGNVSGGV VTCVIRNA..	....PRGLGT PVF..DKLE
<i>C. difficile</i>	EAMKNTIIDA KNQDSVGGI IECVVGGI..	....NVGLGN PFF..DSVE
<i>T. gondii</i>	VRMAVKINQT RSLGDSIGGC ISGATVRP..	....PLGLGE PCF..DKVE
<i>P. falciparum</i>	VOICSYITLKL KKNKDSVGGI ATCIQNP..	....FIGIGE PIF..DKLE
Consensus	.....i... k...gDs!Gg.....v..	....PvGLGe pvf..dkl#

	401		45
<i>S. pneumoniae</i>	RLAQAVVSIN	AFKGVFEFLG	FEAGYRKGSQ VMDEILWSKE DG.....
<i>E. faecalis</i>	KIAQAVVSIN	AFTGAEEFEG	FEMAQRIGSQ LMDEIVWDES TG.....
<i>S. aureus</i>	RIAQGVVSIN	AFKGVSFEGE	FMAAEKPGSE IQDEILYNTE LG.....
<i>B. subtilis</i>	KLAAAVLSIN	AFKGVFEFGIG	FEAAGRNGSE VHDEIIWDEE KG.....
<i>M. tuberculosis</i>	QLAAAVMGIQ	AIKGVIEIGDG	FQTARRRGSR AHDE.MYPGP DG.....
<i>E. coli</i>	DIAHALMSIN	AVKGVIEIGDG	FNVVALRGSO NRDEITKDG.
<i>S. typhi</i>	DIAHALMSIN	AVKGVIEIGEG	FNVVALRGSO NRDEITAGQ.
<i>Y. pestis</i>	DLAHALMSIN	AVKGVIEIGDG	FAVVTKRGSE NRDEITPOG.
<i>H. influenzae</i>	DLAHALMGIN	AVKGVIEIGDG	FAVVEQRGSE HRDEMTPNG.
<i>P. multocida</i>	DLAHALMGIN	AVKAVEIGDG	FAVVNQRGSA HRDEMTPEG.
<i>N. gonorrhoeae</i>	EIAYAMMGIN	AVKGVIEIGAG	FDSVTQRGSE HGDELTPQG.
<i>N. meningitidis</i>	EIAYAMMGIN	AVKGVIEIGAG	FDSVTQRGSE HGDELTPQG.
<i>P. aeruginosa</i>	ELAHALMSIN	AVKGVIEIGAP	FASIAQRGTE HRDELTPQG.
<i>H. pylori</i>	KIAEAMMGLN	GKAVEIGKRG	VESSLKKGSE YNDLMDQKG.
<i>N. crassa</i>	KLIAHAMSIP	ATKGFVEGSG	FEGCEVPGSI HNDFFVSAEN TEIP.....
<i>A. thaliana</i>	ELAKACMSLP	ATKGFVEFGSG	FAGTFLTGLE HNDEFYTDEN GRI.....
<i>C. difficile</i>	TLSHLLFSVP	AVKGVFEFLG	FELADMYGSO SNDEMYEYEGN QV.....
<i>T. gondii</i>	ELAKAMMSLP	ATKGFIEIGQG	FASVTLRGSE HNDRFIPFER ASCSFSESA
<i>P. falciparum</i>	ELAKMILSIP	PVKGIEFGSG	FNGTYMFGSM HNDIFIPVEN MS...TKKE
Consensus	.LA.a.msin	avKgvEiG.G	F.....Gse .De....g.

	451	50
<i>S. pneumoniae</i>	.....	.....
<i>E. faecalis</i>	.....	.....
<i>S. aureus</i>	.....	.....
<i>B. subtilis</i>	.....	.....
<i>M. tuberculosis</i>	.....	.....

E. coli	.....	.....	.....	.....	.....
S. typhi	.....	.....	.....	.....	.....
Y. pestis	.....	.....	.....	.....	.....
H. influenzae	.....	.....	.....	.....	.....
P. multocida	.....	.....	.....	.....	.....
N. gonorrhoeae	.....	.....	.....	.....	.....
N. meningitidis	.....	.....	.....	.....	.....
P. aeruginosa	.....	.....	.....	.....	.....
H. pylori	.....	.....	.....	.....	.....
N. crassa	.....	.....	.....	.....	.....
A. thaliana	.....	.....	.....	.....	.....
C. difficile	.....	.....	.....	.....	.....
T. gondii	STIKHERDGC	SAATLSRERA	SDGRTTSRHE	EEVERGRERI	ORDTLHVTG
P. falciparum	DLLYDDKGEC	.....KNM	SYHSTIQNNE	DQILNSTKGF	MPPK.....
Consensus					

	501																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
--	-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

	551	60
<i>S. pneumoniae</i>	NNLGGFEGGM TNGQPIVVRG VMKPIPTLYK PLMSVDIETH EPYKATVE.	
<i>E. faecalis</i>	NNLGGFEGGM TNGMPIIVRG VMKPIPTLYK PLOSVNIDTK EPYKASVE.	
<i>S. aureus</i>	NHLGGLEGGM SNGMPIIVNG VMKPIPTLYK PLNSVDINTK EDFKATIE.	
<i>B. subtilis</i>	NRLGGLEGGM TTGMPIVVRG VMKPIPTLYK PLKSVDIETH EPFSASIE.	
<i>M. tuberculosis</i>	NRAGGLEGGM TNGQPLRVRA AMKPISTVPR ALATVDLATG DEAVAIHQ.	
<i>E. coli</i>	NHAGGILGGI SSGQOIHAHM ALKPTSSITV PGRTINRFG .EVEMITK	
<i>S. typhi</i>	NHAGGILGGI SSGQHIVAHM ALKPTSSITV PGRTINRMGE .EVEMITK	
<i>Y. pestis</i>	NHAGGILGGI SSGQPVVAHI ALKPTSSIMV PGQTINRQGE .AVEMVTR	
<i>H. influenzae</i>	NHAGGILGGI SSGQPIIATI ALKPTSSITI PGRSINLNGE .AVEVVTK	
<i>P. multocida</i>	NHAGGILGGI SSGQPIVATI ALKPTSSITI PGRSVNLANE .PVEVITK	
<i>N. gonorrhoeae</i>	NHSGGILGGI STGQDICVNI AIKPTSSIAT PRRSIDHGN .PVELATR	
<i>N. meningitidis</i>	NHSGGILGGI STGQDIHVNI AIKPTSSIAT PRRSIDNGN .PIELATH	
<i>P. aeruginosa</i>	NNAGGILGGI SSGQPIVAHL ALKPTSSITT PGRSIDTAGE .PVDMITK	
<i>H. pylori</i>	NRSGGVLGGM SNGEEIIVRV HFKPTPSIFQ PORTIDNGN .ECECLLK	
<i>N. crassa</i>	NFSGGIQGGI SNGAPIYFRV GKFAPATIGQ EQTTATYDGT SEGVLAAK	
<i>A. thaliana</i>	NRSGGIQGGI SNGEINMRV AFKPTSTIGR KQNTVTRDKV .ETEMIAR	
<i>C. difficile</i>	NNNGGIIGGI TTGMPIIFKV AIKPTPSISR QQNTVNIKDK KDDILYIK	
<i>T. gondii</i>	NNAGGTLAGI TSGENIFFRV AFKPVSSIGL EQETADFACE .MNQLAVK	
<i>P. falciparum</i>	NNCGGILAGI STGNNVIFRS AIKPVSSIQI EKETSDFYGN .MCNLKVO	
Consensus	N..GGilGgi s.G.p!...r. a.KPtssi.. p..t.d..g.	

	601		61
S. pneumoniae	SDPTALPAAG	MVMEAVVATV	LAQEILEKFS SDNLEELKEA VAKHRDYT
E. faecalis	SDSTAVPAAS	VVCEAVVATE	VAKAMELEKF SDSFEOMKEA VKRYRLYT
S. aureus	SDSCAVPAAS	IVCEHVVAFA	IKAALLEEFO SNHIEQLKQO IIERROLN
B. subtilis	SDSCAVPAAS	VVAEALSGLK	LQPSLNNSD.....
M. tuberculosis	SDVCAVPAAG	VVVETMVALV	LARAALAEKFG GDSLAETORN IAAYORSV
E. coli	HDPCVGIRAV	PIAEAMLAI	V LMDHLLRORA QNADVKTDP RW.....
S. typhi	HDPCVGIRAV	PIAEAMLAI	V LMDHLLRHRA QNADVKTDP RW.....
Y. pestis	HDPCVGIRAV	PIAEAMVAIV	LMDHLLRORA QCGDVASDVP
H. influenzae	HDPCVGIRAV	PIAEAMVAIV	LLDHLLRFKA QCK.....

P. multocida	HDPCVGIRAV	PIAEAMVAIV	LLDHLLRHKA	QN.....
N. gonorrhoeae	HDPCVGLRTA	PIAEAMLALV	LIDHALRHRA	QNAOVAADTP
N. meningitidis	HDPCVGLRAA	PIAEAMLALV	LIDHALRHRA	QNAOVQVNTTP
P. aeruginosa	HDPCVGIRAT	PIAEAMMAIV	LLDQLVRQRG	QNAOVVRVDTF
H. pylori	HDPCIAIRGS	VVCESLLALV	LADMVLLNLT	SKIEYLKTIY NEN.....
N. crassa	HDPSVVPRAV	PIVEAMALV	IMDAVLAHEA	RVTAKSLPP LKOTINSKG
A. thaliana	HDPCVVPRAV	PMVEAMVALV	LVDQLMAQYA	QCHLFFINPE LQEPLOIEQ
C. difficile	HDPCIVORAI	PVIEAVTAIG	IFDLMKGR..	.....
T. gondii	HDPCVLPRAV	PLVESMAALV	IGDLCLRQRA	REGPHPLLVL POHSGCPSC
P. falciparum	HDSCILFRLE	PIIEASSSMV	IGDLILRQIS	KYGDKKLPTL FRNM.....
Consensus	hDpcv.pra.	p.Eam.a.v	l.d..l....	.....

	651	667
S. pneumoniae	Y.....	.....
E. faecalis	F.....	.....
S. aureus	F.....	.....
B. subtilis	.....	.....
M. tuberculosis	REAPAARVSG	.....
E. coli	.....	.....
S. typhi	.....	.....
Y. pestis	.....	.....
H. influenzae	.....	.....
P. multocida	.....	.....
N. gonorrhoeae	.....	.....
N. meningitidis	.....	.....
P. aeruginosa	.....	.....
H. pylori	.....	.....
N. crassa	TVGNGVSENV	QESDLAQ
A. thaliana	QNATAL....	.....
C. difficile	.....	.....
T. gondii	.....	.....
P. falciparum	.....	.....
Consensus	.....	.....

PCT Application
PCT/GB2003/004104



**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.